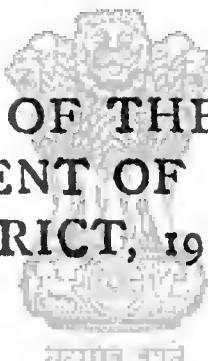

FINAL REPORT OF THE FOURTH REGU-
LAR SETTLEMENT OF THE AMRITSAR
DISTRICT, 1910-1914.



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FINAL REPORT

OF THE

FOURTH REGULAR SETTLEMENT

OF THE

AMRITSAR DISTRICT,



H. D. CRAIK, I.C.S.,

SETTLEMENT OFFICER.



Lahore:

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRINTING, PUNJAB,

1914.

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FINAL REPORT
OF THE
FOURTH REGULAR SETTLEMENT
OF THE
AMRITSAR DISTRICT,
1910-1914.

CHAPTER I.—THE DISTRICT.

1. The Amritsar district occupies a nearly rectangular section of the Bari Doab, or tract of country lying between the Beas and Ravi rivers. It is a small and compact district having an area of 1,559 square miles, of which 1,163 are cultivated, and comprising 1,075 estates. The Beas forms the south-eastern and the Ravi the north-western boundary. The Gurdaspur district separates Amritsar from the Himalayas, while further down the Doab, to the south-west, come the Lahore and Kasur tahsils of Lahore.

2. The district is divided into three tahsils, Tarn Taran, Amritsar and Ajnala. Of these the first named is the most southerly, being contiguous to Lahore and having a frontage of some 30 miles on the Beas river. The Amritsar tahsil intervenes between Tarn Taran and Gurdaspur, and Ajnala, the smallest of the three, stretches along the Ravi the whole breadth of the district. The surface of the country is uniformly level, broken only by a broad ridge of sandy land which runs across the Amritsar and Tarn Taran tahsils. The prevalent soil is a lightish loam, of the kind known in the Central Punjab as *maira*, varied by occasional patches of a stiff clay, which again are usually fringed by strips of undulating, sandy land. The clay soil is almost invariably in or on the edges of the natural depressions or drainage lines, which run down the length of the Doab from north to south, and wherever clay is found there is sure to be saline efflorescence. In natural fertility I should rate Amritsar tahsil as somewhat better than Tarn Taran. The canal-irrigated tract of Ajnala, which adjoins Amritsar tahsil, comprises land as fertile as any in the district, but this is found side by side with stretches of saline waste of the poorest description. The western boundary of this tract is formed by the Kiran or Sakki stream, which enters the Ajnala tahsil from Batala and flows across it from north-east to south-west, joining the Ravi two or three miles above the trijunction point of the Lahore, Amritsar and Sialkot districts. The other half of Ajnala, that lies between the Ravi and the Sakki, is unquestionably the worst part of the district. It consists mainly of alluvial land of poor productive capacity and is much exposed to floods.

3. The district is classed as submontane, its northern boundary being only some 40 miles from the Himalayan foot-hills. Detailed statistics regarding the rainfall of each tahsil will be found in the assessment reports. It will suffice to say here that the annual average is about 23 or 24 inches, of which about three-fourths fall in the monsoon months and one-fourth in the cold weather. It is curious that during the last five or six years Tarn Taran, though the farthest from the hills, should have enjoyed a heavier rainfall than

Rainfall and failure of crops.

the other two tahsils. I imagine that the reason is that canal irrigation now penetrates into practically every corner of Tarn Taran. This has increased the number of trees and the luxuriance of the natural vegetation, which in turn have had an influence on climatic conditions. In the other two tahsils artificial irrigation, though profuse in certain localities, is not so widely distributed.

The district as a whole is probably as well protected from the effects of drought as any in the Province. The more valuable *kharif* crops, rice, maize, sugarcane and cotton, are all grown with the aid of canal or well water. A failure of the summer rains may mean a shortage of fodder and pulse crops, but in the greater part of the district an excessive monsoon, such as occurred in 1908 and 1909, causes more extensive loss and suffering. There are large tracts of low-lying ground in the Nahri circles of Amritsar and Ajnala and in western part of Tarn Taran, in which a heavy downpour means flooding and saturation of the soil. The evil effects of a very wet summer may last for years, and large areas of good cultivated land abandoned after 1908 have not yet been brought under the plough. A total failure of the winter rains would have more disastrous consequences than a shortage in the monsoon supply, as the spring crops cover double the area sown with autumn crops and wheat is the great staple of the district. But even in this season an excessive rainfall is apt to injure the crops on irrigated lands, especially those in or near the clay depressions. The best harvests occur after moderate, and above all timely, winter rains.

Suspensions and remissions of revenue are never likely to be required in the Tarn Taran and Amritsar Tahsils, except possibly in a few sandridge villages whose irrigation is very limited. Even in these suspensions will only be necessary after two or more successive bad seasons. In Ajnala, the Nahri and the greater part of the Uthar circles are also secure. But the western edge of the Uthar and practically the whole of the Hithar and Sailab circles are distinctly precarious. In this tract the personnel of the proprietary body is weak, and a single really bad year will always make it desirable to suspend part of the demand.

4. The main line of the North-Western railway runs right across the district from east to west. From the junction at Amritsar the Pathankot

line branches off to the north and traverses the Amritsar Nahri circle before crossing into Gurdaspur. To the south the Amritsar-Patti railway, opened in 1907, divides the Tarn Taran tahsil into two nearly equal halves. The Ajnala tahsil is thus left in a position of unfortunate isolation, but the rest of the district possesses exceptional facilities for railway traffic. Suggestions for further development have from time to time been considered, such as the linking up of Batala on the Pathankot branch with Beas on the main line, and the opening of a branch line from Amritsar to Ajnala, and thence on through part of Batala tahsil to Sialkot. The bridging of the Ravi is the chief obstacle to the fulfilment of this latter project, but the former presents no engineering difficulties at all. A line from Batala to Beas would run through a very rich and densely populated tract and would be certain to pay a handsome return on the capital expenditure.

The Grand Trunk road runs parallel to the main railway line across the district from the Lahore border to the Beas bridge. Other metalled roads radiate from Amritsar to Tarn Taran, Majitha and Ajnala, and the latter has lately been extended to Ram Das in the extreme north-west corner of the district. This is the only metalled road in Ajnala, and the bridge carrying it over the Sakki stream is the only one in the tahsil. The tract lying between the Sakki and the Ravi is thus difficult of access, as after any rain the Sakki is usually unfordable, and ferries are few and far between. Carts and camels must at any season cross by the bridge. The old Amritsar-Pathankot road has not been remetalled for many years and has sunk to the status of an inferior *kacha* road. There are good driving roads along the main branches of the canal, but these are closed to ordinary traffic, and the district is intersected by a network of unmetalled tracks of varying quality.

Amritsar, with a population of 1,53,000, is the second largest city in the Province, and is the centre of an important and expanding trade in wheat, cotton, hides and piece-goods. Other important towns are Tarn Taran, Majitha and Jandiala, the two latter being in the Amritsar tahsil. At Tarn Taran a large market was built a few years ago close to the railway station, but it has not hitherto proved very successful owing to difficulties connected with octroi and restrictions on retail trade. Patti, a town just within the borders of the Kasur tahsil, attracts most of the export trade from the southern half of Tarn Taran. In Ajnala tahsil there is no considerable town nor any market of importance. The Nahri and Uthar circles are within comparatively easy reach of Amritsar city, but what little surplus produce is available from the trans-Sakki tract has to be carried a long way. Consequently prices are usually lower in this tract than in the rest of the district.

5. The district is densely populated and the pressure on the soil is,

Population—The principal tribes.

except in Tarn Taran, severe. Between 1891 and 1901 the total population,

including that of the city, rose from 993,025 to 1,014,118. In the succeeding decade it fell to 880,728, the decline being mainly due to two bad epidemics of malaria and to repeated visitations of bubonic plague. Emigration to the new canal colonies was also in part responsible. Nevertheless the incidence of the population on the square mile of cultivation is still very high, being 627 (excluding the city population) in Amritsar and no less than 764 in Ajnala. In Tarn Taran it falls as low as 549, and this is the only part of the district where the reduction in population has not been of economic advantage to the survivors. The proprietary body is for the most part a sturdy one, Jats, mainly of the Sikh faith, holding 74 per cent. of the total area. Other agricultural tribes include Rajputs, Pathans, Sayads, Arains, Gujars and Dogars. Nearly all of these are Musalmans and all, except the Arains, are inferior to the Jats as agriculturists and revenue-payers. The only tract in which Jats do not hold the lion's share of the land is the poorest in the district, comprising the Hithar and Sailab circles of Ajnala. Here Rajputs, Arains and other Musalman tribes predominate. Their holdings are usually miserably small, their cattle weak and under-sized and their crops extremely precarious. Consequently they are for the most part deeply involved in debt, and the revenue demand is often much in arrears.

6. 83 per cent. of the total area is cultivated in Tarn Taran, 80 per cent.

Cultivated area.

in Amritsar and 58 per cent. in Ajnala.

For the district as a whole the figure is

75 per cent. The two southern tahsils may thus be described as closely cultivated and there is no likelihood of further expansion in them. The cultivated area has in fact contracted slightly since the settlement of 1888—1893 by 2 per cent. in Tarn Taran and 1 per cent in Amritsar. This is due mainly to the spread of saline efflorescence over the area water-logged by the heavy floods of August 1908. The fields so affected have not yet recovered from this disaster, and it seems doubtful if they ever will. The same causes account for a small decline in cultivation in the Nahri circle of Ajnala. In the Uthar and Hithar circles of that tahsil the spread of *kallar* has also been marked, and in addition some of the lighter sandy lands have been temporarily abandoned owing to recent unfavourable seasons. In the Sailab circle cultivation has contracted by no less than 19 per cent. owing to the steady set of the Ravi into its left bank. Many square miles of what was at last settlement fertile *sailab* land have been completely eroded and now exist only in the shape of unculturable sand or jungle. This area and the large stretches of saline waste in the Nahri and Uthar circles account for the high proportion of uncultivated land in Ajnala. Full details of the cultivated area are given in Appendix I.

7. Throughout the district water is found nearly everywhere close

Water-level and well irrigation.

to the surface, and well irrigation is

easy. The people prefer to take canal

water where it is available, but 29 per cent. of the cultivated area is still watered by wells. Close to the high bank of the Beas the depth to water varies from about 60 feet in the north of Amritsar Tahsil to 36 feet in parts of

Tarn Taran. The water-table gradually rises as the surface of the country slopes gently down towards the basin in which Amritsar city lies. In the Jandiala and both Manjha circles the depth to water is from 16 to 21 feet, but in the Nahri and Mirankot circles of Amritsar it is only 11 feet, and in the civil station and other environs of the city the spring level is only some 7 or 8 feet below the surface. In the Nahri circle of Ajnala it sinks again to 14 feet and in the Uthar to 16 feet, thereafter rising gradually as the Ravi is approached to about 10 feet. Twenty years ago the last Settlement Officer estimated that the water-level had risen about 10 feet in the Amritsar tahsil between 1865 and 1892 owing to infiltration from the canal, and to a smaller extent in the other two tahsils. Since 1892 there has been a further steady rise, which I should put at not less than 6 feet where canal irrigation is most profuse. Thus in most parts of the district well-sinking is easy and profitable, but it is unlikely that there will be much increase in the number of wells in the future, save possibly in those parts of Ajnala which are not reached by the canal. The well apparatus is always of the Persian wheel variety, except in some of the shallow unlined wells in the Beas and Ravi riverains, where the bucket-lift is used.

8. All four branches of the Upper Bari Doab Canal traverse the district. The Sobraon, Kasur and Main branches all cross the Amritsar and

Canal irrigation.

Tarn Taran tahsils, while the Lahore branch runs through the southern part of Ajnala. No irrigation is done from the Kasur branch in that part of the Jandiala assessment circle that lies north of the Grand Trunk road, but with this exception practically the whole area of the Doab from the high bank of the Beas to the Sakki *nala* is intersected by a network of distributaries and minor channels. The area recorded as canal-irrigated amounts to 255,283 acres or 31 per cent. of the total cultivation. This is an advance of 94,514 acres or 58 per cent since last settlement. From most of the distributaries water is supplied for both harvests, but some of those on the Sobraon and Kasur branches and two or three on the main canal irrigate during the *kharif* harvest only.

9. I have already alluded to the alarming and continuous rise in the level of sub-soil water in the canal-irrigated tract, and in paragraph 7 of

The water-logging problem.

the Amritsar tahsil assessment report I have made some remarks on the general question of water-logging which is closely connected with this rise. The widespread floods which occurred after the exceptionally heavy rainfall of August and September 1908, and which were followed by a severe epidemic of fever, made the problem of water-logging an urgent one, and since that date it has engaged the close attention of successive Irrigation and District Officers. The tract affected is roughly that part of the district that lies between the Kasur *nala* and the Sakki stream, and more especially the triangle of low-lying country formed by the Lahore and main branches with the Grand Trunk road as its base. Much has been done since 1908 by deepening and widening natural drainage channels so as to increase their capacity for carrying off storm water, and by the provision in some localities of artificial drains. In addition experiments have been made in providing an impervious lining to certain water channels with the object of checking percolation, and a few distributaries have been closed for *rabi* irrigation. Some Irrigation Officers were disposed to favour a general curtailment of canal irrigation as the best solution of the difficulty, and a set of rules designed to effect this object were drawn up by a committee of Civil Officers and Engineers in 1911. This policy was not, however, approved by the Financial Commissioner, who doubted whether it was wise or prudent to interfere with existing conditions except in villages where excessive irrigation had undoubtedly contributed to water-logging.* Sir James Douie suggested that it would be better if the case of each village, where water-logging was present or imminent, were separately considered by the Settlement

*Letter No. 597, dated 9th October 1911, from Junior Secretary to the Financial Commissioners to the Revenue Secretary to Government, Punjab.

Officer and Irrigation Engineer in consultation, and a remedy devised if possible. These views were accepted by Government, and I have accordingly supplied to the Executive Engineers concerned a register, giving the details of canal-irrigated crops and area in all villages which I considered affected by water-logging or peculiarly exposed to flooding. I have also noted in each case what appeared to me the causes of the evil, and have where possible suggested a remedy. The latter usually took the form of an improvement in the disposal of surface drainage. Only in a few exceptional cases have I recommended a reduction in the supply of water. I am very doubtful if such reduction would have the desired effect of lowering the water-table, and am certain that it would provoke great resentment among the peasantry. The Executive Engineers concerned have discussed with me the contents of this register, and are now considering in detail certain of the remedies suggested. Much has already been done, as noted above, to improve the state of affairs, and with the better facilities now available for the rapid disposal of surface drainage, it may be asserted with confidence that no repetition of the disasters of 1908 need be anticipated. In the low-lying environs of Amritsar city, where the sub-soil water-table is probably higher than at any other point, canal irrigation will, I understand, shortly be replaced by a system of tube-wells operated by electricity. One such well has already been sunk and has just begun working.

10. The comparative importance of the various staples is shown in the form of percentages on the total matured area of both harvests in the following table, the figures in which exhibit the average results of the ten harvests selected as the basis of the produce estimate :—

Harvest.	Kharif.	Crops.	TAHSILS.			Total District.
			Ajnala.	Amritsar.	Tarn Taran.	
Kharif.	Rice	...	7.6	3.8	2.8	4.1
	Maize	...	5.8	4.9	5.0	5.1
	Pulses	...	7	3.4	.7	1.7
	Sugarcane	...	2.5	2.7	.8	1.9
	Cotton	...	3.9	3.2	5.7	4.4
	Fodder	...	6.3	14.2	9.8	10.7
	Others	...	1.1	2.1	.6	1.3
Total Kharif			27.9	34.3	25.4	29.2
Rabi.	Wheat	...	46.6	22.9	23.3	26.7
	Wheat and gram	...	8.3	22.8	28.1	22.0
	Barley	...	3.9	2.0	1.1	2.0
	Gram	...	4.5	5.1	8.3	6.3
	Oil-seeds	...	1.7	2.0	2.8	2.3
	Fodder	...	9.2	8.5	9.7	9.2
	Others	...	3.9	2.4	1.3	2.9
Total Rabi			72.1	65.7	74.6	70.8
TOTAL BOTH HARVESTS			160	100	100	100

Wheat, either sown by itself or mixed with gram, is by far the most important staple of the spring harvest, which occupies more than double the area covered by the autumn crops. Gram by itself is practically confined to villages on the main sandridge, where the light unirrigated soils are unsuitable for wheat. In the *kharif* harvest a large area is always devoted to great millet, grown as fodder, and to maize, which forms the chief food of the people during the winter months. Rice is an important crop in the clay soils of the Amritsar and Ajnala Nahri circles. Cotton has of late years greatly increased in popularity owing to the high prices ruling in the market. There has been a corresponding shrinkage in the area under sugarcane, which is now grown practically only for local consumption. The Amritsar cane is distinctly inferior to that grown in Gurdaspur.

On the total cultivated area of the district (750,323 acres, of which nearly two-thirds are artificially irrigated), 933,388 acres of crops are sown

annually. Of these about 10 per cent. fail and the balance, 843,962 acres, come to maturity. In other words on each 100 acres of cultivation about 112 acres of crops are raised.

11. Some of the leading Sikh Sirdars and other *Raises* are comparatively large land-owners for the Central

Cultivating occupancy—Tenancies and rents.

Punjab, but only in a few cases do

their holdings extend beyond three or four hundred acres. The district as a whole is essentially a tract of small peasant proprietors, and as the general rule of succession is that all sons are entitled to an equal share in their father's land, the tendency is for holdings to become continually smaller. At present the average cultivated area for each shareholder is a little over 6 acres in Tarn Taran and Amritsar, and only 4½ acres in Ajnala. In the Ajnala Sainab the average falls as low as 3½ acres, and considering the poverty of most of the soil in this circle it can easily be realized that existence on the produce of so minute a plot is a constant struggle. Only 48 per cent. of the cultivated area is tilled by actual owners. Many of the proprietors are absent for years together on military or other service, or have emigrated permanently to the new canal colonies. 7 per cent. is held by tenants with a right of occupancy, most of whom pay a small cash *malikana* in addition to the land revenue, and 1 per cent. is cultivated rent-free, usually by way of a charitable concession to the village priest or some similar functionary. The balance of 44 per cent. is held by tenants-at-will, among whom rents in kind are commoner than rents in cash in the proportion of four to three. The tendency of late years has been for the landlord to insist on receiving a share of the produce on the better irrigated lands. In this densely populated district, where the demand for land is always keen, the landlord is usually able within limits to dictate his own terms to his tenants, and he has come to realize the great advantage of a kind rent in these days of high prices and comparatively light assessment. As a rule he will accept a cash rent only on unirrigated fields, where the crops are always uncertain and in some seasons there may be little or no produce to divide. In a good year the tenant of such fields may make a large profit, but in a bad year the landlord is certain of some return, as cash rents are practically never remitted.

12. The principal statistics regarding land sold since last settlement and now held under mortgage are summarized in the following table:—

Percentage of sales and mortgages.

1	2	3	4	5	6	7	8	9	10	11	12	13
TAHSILS.	SALES SINCE SETTLEMENT.						MORTGAGES WITH POSSESSION NOW EXISTING.					
	To zaminars.		To others.		Total.		To zaminars.		To others.		Total.	
	Percentage of cultivated area.	Price per acre.	Percentage of cultivated area.	Price per acre.	Percentage of cultivated area.	Price per acre.	Percentage of cultivated area.	Price per acre.	Percentage of cultivated area.	Price per acre.	Percentage of cultivated area.	Price per acre.
Ajnala ...	4.2	157	1.6	144	5.8	153	15.2	145	7.0	127	22.2	139
Amritsar ...	3.6	217	1.5	401	5.1	273	11.2	153	4.1	129	15.3	146
Tarn Taran ...	2.1	219	1.0	195	3.1	211	13.4	151	3.5	120	16.9	144
District ...	3.1	201	1.3	273	4.4	222	18.0	150	4.4	125	17.4	144

The small proportion of land transferred by sale is evidence of the general prosperity of the proprietary body. The prices given in the statement underestimate the present selling value of land. In the quinquennium from 1906 to 1911 the average price for each cultivated acre sold was Rs. 287 in Tarn Taran, Rs. 245 in Amritsar and Rs. 160 in Ajnala. In the Amritsar tahsil the prices realized for building sites near the city have been excluded in calculating the average. During the currency of the late settlement the value of cultivated land has risen by 11.4 per cent. in Tarn Taran and by 73 per cent. in Amritsar. In Ajnala the advance has been 7 per cent only, but the fact that most transactions in this taluk include an appreciable area of waste detracts from the accuracy of the statistics.

In all three tahsils the proportion of land mortgaged is slightly higher than 20 years ago, but much lower than before the Alienation of Land Act came into force in 1901. In Amritsar and Taran Taran a smaller fraction of land is now mortgaged than in Batala, the richest tahsil of the neighbouring district of Gurdaspur. In Ajnala the proportion is higher, but even here two-thirds of the mortgages are held by agriculturists. Except in certain parts of the Sialkot and Hithar circles, there is no serious indebtedness, and in all tahsils the area redeemed has in recent years exceeded that mortgaged.

13. The last two decades have witnessed a steady decline in the number of bullocks and cows, but this has been balanced by an increase in male and milch buffaloes. Male buffaloes are cheaper, though less efficient workers than bullocks, and as the price of nearly all classes of live-stock has more than doubled since last settlement, this is a serious consideration. Other causes contributing to the decrease in bullocks are the supersession in certain tracts of wells by canal irrigation, and the emigration of many cultivators to the canal colonies. In the poor trans-Sakki circles, where the cattle are weak and under-sized, there is a decided shortage of animals fit to work the wells and ploughs. Elsewhere stock may be said to be sufficient. The total value of the dairy produce of the district is doubtless far higher than at last settlement owing to the great increase in the number of milch buffaloes, a hardier animal and a better milker than the cow. But few land-owners keep milch cattle for profit, as the area available for grazing is very limited and the cattle have to be stall-fed for most of the year. Except for the buffaloes, most of the cattle bred in the district are of a poor stamp, and the Amritsar farmer has perforce to buy oftener than he can sell. He has certainly been hard hit by the great advance in prices, and this he constantly cites as an argument against an increased assessment.

14. Military service is extremely popular among the Sikh Jats, especially in Tarn Taran. From the miscellaneous income. whole district there are probably not less than 6,000 men in the employment of Government and another 2,000 in receipt of pensions. The gross amount disbursed in pay and pensions to these 8,000 men has been estimated to be about Rs. 25 lakhs per annum, and of this sum probably not less than a quarter is remitted to their homes. Large remittances are also made by the numerous Jats who emigrate to Canada, Australia, South Africa and elsewhere to engage in commerce or to take service under private firms. More than 6,500 squares of land in the various Punjab and Sindh Canal colonies were assigned to colonists from Amritsar. These large grants have by no means satisfied the land-hunger of the Amritsar *zamindar*, but they have certainly contributed largely to the material prosperity of those who have remained at home. With such large extraneous earnings there are few villages that are wholly dependent on the fruits of the earth, and there can be no doubt that the standard of living among the agricultural classes has risen during recent years and still continues to rise.

CHAPTER II.—FISCAL HISTORY.

15. I quote below the account given in the last settlement report of the history of the district till the annexation of the Punjab in 1849:—

“On the decline of the Moghal Empire, the tract now comprised in the Amritsar district was gradually taken possession of by the more powerful of the Sikh chiefs and confederacies. Prominent among these in Amritsar were the Ahluwalia Sardars, and the Ramgarhia, Bhangi and Kanhaya *misl*. In Tarn Taran the Ahluwalias were all powerful in the south; most of the remainder was ruled by the Bhangi *misl*. Tahsil Ajnala, then known as the Saurian *ilaqa*, was more sub-divided. Sardar Jodh Singh of Saurian, Karm Singh of Chhina and Nar Singh of Chamiari, held a large part of the country, and the Kanhaya seems to have been the only one of the confederacies that was strongly represented. These chiefs gradually gave way to the dominant power of Maharaja Ranjit Singh, who from about 1810 A.D. onwards began acquiring all that he could. At first he was leagued with the Kanhaya *misl*. The Ahluwalias were driven across the river and the Bhangis, the Ramgarhias, and minor chiefs brought under subjection. The Gil chiefs still retained some power, exercised under the Maharaja at Majitha, and the Sidhus were in the same position at Atari. The Sindhanwalia family, which was related to the Maharaja, received a *jagir* in Ajnala.”

16. The district as first constituted after annexation included the *Talwandi pargana*, now known as the *Raya Tahsil*, on the right bank of the Ravi, but this was transferred to the Sialkot district a year or two later. The summary settlement was carried out by Major Lake in 1849-50. It was based on the scanty records available of the collections made by the Sikhs, who had levied revenue by an appraisement of the produce. The assessments imposed were unequal and in many estates of the Amritsar and Ajnala tahsils crushingly severe. But the demand so imposed was only paid for three or four years, as the regular settlement was commenced in 1852 under the direction of Mr. R. H. Davies. During its progress certain minor adjustments were made in the district and tahsil boundaries, which have not since been altered. Mr. Davies' instructions were to impose an assessment equivalent to the value of one-fourth of the gross produce. He reduced the demand of the summary settlement by 10 and 11 per cent. in Amritsar and Ajnala, respectively, and raised it by 7 per cent. in Tarn Taran. The *jamas* announced were as follows, excluding the sums assessed on petty revenue-free grants:—

		Rs.	Rate per
			cultivated
			acre.
Amritsar	...	4,82,446	1 15 10
Tarn Taran	...	2,58,244	1 1 8
Ajnala	...	2,74,260	2 3 5
Total	...	9,64,950	

The fall in prices which commenced in 1851 continued for some years after the introduction of the regular settlement, and it was soon found that the new demand on the Ajnala tahsil was too severe. A special revision was carried out in 1859 by Mr. Blyth, which resulted in a reduction of the assessment of this tahsil by 15 per cent.

17. The term of Mr. Davies' settlement expired in 1862, two years after the opening of the Bari Doab Canal. The district was then resettled under the supervision of Mr. Prinsep, Settlement Commissioner, Agha Kalbi-abid Khan, who had served under Mr. Davies in the same capacity, being his principal assistant. New records and maps were made for each estate, assessment circles were recast and rates framed for each. But Mr. Prinsep wrote no

assessment or final reports, and made a personal inspection only of a limited number of estates. The principle followed in assessing was that Government was entitled to a share equivalent to one-half of the landlord's net assets, which were supposed to be 50 per cent. of the gross produce. The *jamas* as finally announced in 1865 were as follows:—

Tahsil.					Initial.	Deferred.	Ultimate.
					Rs.	Rs.	Rs.
Amritsar	...	...	...	...	4,02,895	12,420	4,15,315
Tarn Taran	...	...	...	...	2,81,323	11,000	2,92,323
Ajnala	...	...	...	...	2,32,223	10,401	2,42,624
Total		...			9,16,441	33,821	9,50,262

Deferred assessments were imposed on estates classified as not fully cultivated and backward, *i.e.*, those in which there was a large area of waste which Mr. Prinsep anticipated would come under the plough. In many cases this anticipation has not proved correct. Land watered by the canal was assessed in its unirrigated aspect, but a fluctuating owner's rate or water-advantage rate of one rupee per acre was imposed on all fields receiving canal water for the *kharif* harvest. If the same field received canal water again for the *rabi* harvest, it paid a further rate of eight annas per acre. The settlement was ultimately sanctioned for a term of 20 years dating from *kharif* 1865, but was actually in force for as long as 27½ years in Ajnala. A very full account of Mr. Prinsep's methods, of the controversy to which they gave rise and of the working of his settlement will be found in paragraphs 17 to 24 of the final report of 1893.

18. The settlement which has just expired lasted from February 1888 to October 1893, Mr. J. A. Grant being in charge of the operations. During this period of 5½ years the whole district with the exception of 14 villages was re-measured on the square system, and a new record-of-rights was drawn up for each estate. The result of the re-assessment was as follows:—

Tahsil.				Previous demand.	New demand.	Increase, per cent.
				Rs.	Rs.	
Tarn Taran	...	...	...	8,63,641	4,00,483	32
Amritsar	...	...	...	4,52,739	5,88,644	19
Ajnala	...	...	...	2,70,301	3,17,088	18
Total		...		10,26,681	12,56,215	23

It will be noticed that the figures for the "previous demand" differ from those given as the ultimate result of Mr. Prinsep's settlement. The difference is accounted for (*a*) by changes due to dialuvion and similar cases, (*b*) by a special reassessment of the estate of Amritsar *khas* made in 1876 which resulted in an enhancement of nearly 24 per cent., and (*c*) by the fact that the figures in this paragraph include assigned revenue of all kinds, whereas sums assessed on petty revenue-free plots were excluded from the table in the preceding paragraph.

The fluctuating water-advantage rate was abolished from April 1891, and a higher schedule of occupier's rates, differentiated according to the crops irri-

gated, was introduced from that date. This schedule is still in force. All other charges on canal-irrigated land were included in the fixed land revenue, the difference between the *barani* and *nahri* rates in each circle being called the *nahri parta*. The rate varied from 12 to 4 annas per acre in the different circles. The new demand was announced in Tarn Taran with effect from *kharif* 1891, in Amritsar from *kharif* 1892 and in Ajnala from *rabi* 1893. The term of the settlement was sanctioned for 20 years.

19. Mr. Grant's village inspections were most thorough, and his distribution of the new demand was careful Working of the last settlement. and equitable. The assessment was de-

signedly a lenient one and has been collected easily enough in Tarn Taran and Amritsar and in the Nahri circle of Ajnala. Small sums had to be suspended in the famine year 1899-1900, and a part of these was ultimately remitted as an act of grace in connection with the Coronation of King Edward VII. Remissions on a fairly extensive scale were required after the floods of 1908 and 1909 in the low-lying canal-irrigated tracts, but in years free from any calamity of a special nature the settlement has worked smoothly. In the weaker villages of the Uthar circle there has from time to time been difficulty in realising the demand, and in the Hithar and Sailab circles it has been constantly in arrears. This tract has been visited by a series of misfortunes which it was impossible to foresee. Its fiscal history is related in considerable detail in paragraph 13 of the Ajnala assessment report and need not be repeated. Its effect is to show that even in a normal year the demand in these two circles has been relatively severe. It is, however, only fair to Mr. Grant to point out that the assessment he proposed was considerably lighter than that actually announced, his rates having been substantially enhanced by the higher revenue authorities.

CHAPTER III.—THE REVISION OF THE RECORD.

20. The unit of measurement throughout the district is the *karam* of 60 inches. A square *karam* is called a *sarsahi*, and 9 *sarsahis* form a *marla*. Table for calculation of areas.

Twenty *marlas* are equal to one *kanal*, 8 *kanals* to 1 *ghumao* and 9.68 *kanals* to one acre. The term commonly employed by the people in speaking of any but the smallest areas is the *bigha* of 4 *kanals*, but this word is not used in the official records, in which the *kanal* is the unit of area, though village totals are expressed in *ghumao*s and acres.

21. I have already noted that at last settlement all but 14 estates were remeasured on the square system. Villages remeasured.

Mapping sheets, each ruled into 16 squares, were used, and the scale was 200 feet or 40 *karams* to the inch. In the 14 villages not then remeasured amended copies of the 1865 maps were prepared. These were on an inconveniently small scale of 312 feet to the inch, and further amendment would not have been satisfactory. Accordingly these 14 estates have now been re-mapped on the square system. In addition 3 villages on the Beas and 33 on the Ravi were completely remeasured, and in other riverain villages the area subject to floods has been similarly treated. These riverain measurements were carried out with the assistance of the Survey Department on a system which is described below. In all villages remeasured the scale employed was 200 feet to the inch, and as elsewhere operations have been confined to the correction of the maps of last settlement, this scale is now uniform throughout the district.

22. It was known that a high standard of accuracy had been attained in Mr. Grant's maps, and as comparatively few changes in field boundaries had occurred since last settlement, it was obvious that the compilation of new maps would have entailed an unnecessary expenditure of time and money and that correction of those already in existence would suffice. But considerable

delay occurred before it was finally decided on what system the work should proceed. The settlement staff began to arrive in October 1910, and their first task was to check the accuracy of the existing maps by the four tests prescribed in Appendix XXI to the Settlement Manual. This was before the issue of Correction Slip No. 29 S. M. of the 26th September 1911, which dispensed with the second and third tests in the case of maps prepared on the square system. Both the settlement maps and the supplementary sketch maps prepared by the *patwaris* at subsequent quadrennial attestations were checked. But it was soon found that the latter were for the most part so inaccurate that they could not be accepted as a correct record of fields newly formed since last settlement, and it was decided that all such fields would have to be re-chained.

Meanwhile, as the result of a conference of Settlement Officers held in Lahore on January 2nd, 1911, under the presidency of the Financial Commissioner, it was settled that map correction should be started on the procedure prescribed by Appendix XXI, in order that further time should not be lost, but that experiments should be made with modified forms of that procedure in a few selected villages. The Financial Commissioner (Sir James Douie) arranged to tour in the district in February and to test on the spot the comparative value of the various methods followed.

Systems tried experimentally.

23. The following modifications of the ordinary procedure were tried :—

(a) *The tatimma system.*—Under this method the map of last settlement is left uncorrected. But a supplementary map, similar to that prepared by the *patwari* at quadrennial attestation, is compiled of all fields of which the boundaries have been changed from any cause since settlement. The supplementary map is drawn on an ordinary *musavi*, in which each field or group of contiguous fields is shown as a detached block, and is intended to be attached to the map of last settlement, the two being filed together as the record-of-rights of the new settlement. This method was tried in one village only, Kaler in the Upper Manjha circle.

(b) *The system devised by Mr. Fagan as Commissioner of the Rawalpindi Division, for map correction preliminary to re-settlement in Gujarat.*—The *patwari* has to prepare by a special *girdawari* a list of all fields of which the map requires correction. These would be of three kinds:—(i) Fields, which in consequence of past changes, such as partition, sale, mortgage with possession, or exchange, had already received *batta* numbers in the current records; (ii) those in which changes have taken place which ought to be embodied in the map, but which have hitherto been recognized only by *min* numbers. An example is clearly recognized separate possession by two or more share-holders in a joint holding; (iii) new fields which ought to be shown in the map, but which have not yet been given separate numbers of any kind, e.g., fields recorded as unirrigated, part of which have become irrigated, or fields inconveniently large for crop inspection purposes. In such cases fields are to be sub-divided only in accordance with boundaries actually existing on the ground.

After preparing this list and the genealogical table the *patwari* fills in *khatauni* slips for the whole village. This is a modification of the Gujarat system, which dispenses with *khataunis*. For the purposes of map-correction the *patwari* is supplied with a tracing on ordinary ruled mapping-sheets of the map of last settlement, in which the old field boundaries have been inked in and the settlement numbers entered in pencil at head-quarters. No *karukans* are shown. With this tracing in his hand the *patwari* visits every field in the villages for the purpose of completing the entries in the *khataunis*, but he

re-measures all the new fields entered in his list, correcting the tracing where necessary in pencil. He re-chains only such boundaries as have been altered by the sub-division of fields, and notes in pencil the *karukans* only of boundaries actually chained and such others as are required for calculating the area of new fields. The *kanungo* after checking the corrections inks them in, using red ink for all altered field boundaries and black ink for noting the *karukans*. He also enters in red a new consecutive series of numbers for all fields in the village, rubbing out the pencilled settlement numbers as he does so. The tracing is left untouched, except for the new numbers, as regards all fields which have not been altered since settlement. The field book contains entries only of the corrected fields. The area of the field is calculated by the simplest method, *viz.*, by taking the average length of each pair of opposite sides. When a field is divided into two parts the area of the smaller part only is calculated. That of the larger part will be the area of the old field, less the area of the smaller part.

This system of map correction was tried in the first instance in five villages, the *patwaris* of which were known as rapid and capable workers.

(c) A system similar in all details to that just described, with the single omission of *khatauni* slips, was tried in two villages. Changes in soil classification were under this method noted in the margin of the old *khastri girdawari*.

24. On his tour through the district in February 1911 Sir James Douie went thoroughly into the results of all these experiments. The *tatimma* system he did not approve, partly because he considered it essential that there should be a single map with a new series of numbers for the new settlement, and partly because it was clearly only suited to villages in which the percentage of changes was very small. Its results in Kaler were satisfactory enough, but Sir James Douie thought it better to have a single uniform procedure throughout the district. The Gujarat system without *khataunis* was also rejected. It was found that in practice it saved no time, as the *patwari* had to compile a rough catalogue of the fields to be grouped in the various holdings. Without this document, which was to all intents and purposes an unauthorized and unchecked *khatauni*, he could not prepare a correct *jamabandi* or statement of rents. The Gujarat system with *khataunis* was approved as that best suited to the circumstances of the district, and has accordingly been followed, except in Kaler and the two villages where *khataunis* had been experimentally dispensed with, Har-do-rattan in Tarn Taran and Thathian in Amritsar. There are also a few villages in which map correction had been carried out on the lines laid down by Appendix XXI of the Settlement Manual pending a decision as to the procedure to be adopted. Except for these and the few riverain and other estates completely remeasured, the system described in (b) of the preceding paragraph has been followed throughout the district.

The principle underlying this system is that the new maps are merely supplementary to those of last settlement. They are to be considered authoritative only as regards those fields which have undergone changes since last settlement, such fields being conspicuous by reason of the red ink corrections in their boundaries. The staff of the present settlement are not responsible for the accuracy of the maps of fields which have undergone no change, or for the correctness of *karukans* other than those chained by them on the ground. In case of any dispute regarding an unchanged field or the length of any field boundary for which the new map does not show a *karukan*, a reference must be made to the map of the 1888-1893 settlement. A note to the above effect has been endorsed by the Tahsildar on the top sheet of each village map.

25. The survey of the Beas and Ravi riverains was carried out in the cold weather of 1909-10 before the commencement of settlement operations. Field parties of the Survey Department laid a traverse along the beds of both rivers, and with the assistance of a special staff of two Naib-tahsildars and

thirteen *kanungos* prepared for the *patwaris* two sets of 20-inch sheets. The first set consisted of continuous sheets showing for the whole riverain the "paper" boundaries transferred from the settlement maps where the actual boundary could no longer be traced on the ground or was disputed. These were obtained by enlargement from the Survey Department's four-inch sheets, which again are a reduction of the settlement maps. These sheets were useful as an aid towards the decision of such boundary disputes as were found to exist, but could not be accepted as an authoritative record of the boundary. In many cases there was a considerable discrepancy between the "paper" boundary and that shown in the village map as prepared at last settlement, or as corrected when a fixed boundary was laid down on the Beas in 1903. The discrepancy was due partly to the method of compilation, which involved both reduction and enlargement, and partly to the fact that errors of under two chains were "meaned out" in the Survey Department office. On a reference being made to the Settlement Commissioner it was ruled that the "paper" boundaries were in no sense authoritative, and that those shown in the settlement or corrected maps should be adhered to as the framework upon which the internal details of the village were to be plotted in.

The second set of *musavis* supplied by the Survey Department consisted of separate sheets for the whole area of each village. On them were shown the traverse points marked on the ground by the field parties, which were usually adjacent to the village boundary, and such fixed points in or near cultivation as could be marked on the ground. On these sheets the *patwaris* plotted in the village boundaries for the entire estate and the field boundaries for the *kacha* portion. This they were easily able to do from the *data* supplied, and they were spared a vast amount of labour which would have been necessary if they had been obliged to lay down their own squares. All the Survey Department's sheets were indexed and numbered in a single series for the whole of each riverain. All are referable to a single set of squares, which though never actually laid down on the ground are scientifically accurate. They can be laid down when required, as baseline pillars have been erected in each village or group of small villages in ground well removed from river action. The squares can be locked up on mark-stones placed on the opposite bank of the river. The base pillars have been marked on the index-maps supplied to *patwaris* and on the Survey Department's sheets which have been filed for record in the *Sadr Kanungo's* office.

The system I have described was the outcome of experience gained in Gurdaspur, and is described in more detail in paragraph 16 of Mr. Kennaway's final report of the settlement of that district. I did not see the work actually in progress, as operations were completed before I joined the district at the end of October 1910. The last batch of the Survey Department's sheets were not ready till April 1910, and thereafter the revenue staff had to work at high pressure to complete the internal measurements before the summer floods rose and swept away all the traverse points. A large number of *patwaris* was drafted to the riverain circles and the special staff was strengthened by the addition of the six *kanungos*. The whole work was carried out under the superintendence of the Extra Assistant Settlement Officer, Khan Sahib Sheikh Fazl Karim, who was then the Deputy Commissioner's Revenue Assistant. He was on tour practically continuously throughout May and June, and it is due to his close personal supervision and to the example of energy which he set, that the work was completed in time. In addition to the maps new *jamabandis* were drawn up in all riverain villages, and these were of great assistance when the time came for compiling the record-of-rights for the new settlement. The *jamabandis* prepared by the special staff were not of course accepted as part of the standing record.

As already noted, 36 villages were entirely re-measured by the method described above. In other riverain villages only the area exposed to river action was so treated, map correction on the ordinary lines being carried out in the *pakka* portion. An attempt was made later to combine the corrected

and re-measured areas into a single map, by transferring the former to the Survey Department's sheets. But this idea was abandoned, as it was found that the work could not be done accurately and was not really necessary. In such villages the maps are thus based on two sets of squares, but the scale is the same in both, and the contiguous sheets can be made to fit together with sufficient accuracy by getting fixed points on their boundaries to coincide. In each village there is a single series of field numbers.

26. Three copies of the map of each village have been prepared. The

Copies of village maps.

tracings on which the correction was actually made in the field have been

consigned to the district revenue record-room as the authoritative copy (*part-sarkar*) of the new settlement. In a few villages correction was carried out on the *patwari's* copy of the old settlement map. In such cases a fair copy has been prepared and filed together with the original. Each sheet has been signed by all officials concerned in their compilation and attestation, from the Tahsildar to the *patwari*. In the record-room they are stored in a number of iron safes, divided into shallow shelves of a sufficient size to allow of the sheets, which measure 30 by 25 inches, being spread out flat. A copy of the map traced on long cloth has been supplied to each *patwari* as the *part-patwar*. In addition the *patwaris* of all riverain villages have been given copies of the *musavis* of that portion of such villages as are exposed to river action. These will be utilized in dialuvion measurements. A third copy on a continuous piece of tracing cloth has been filed in the tahsil, and is intended to be amended and brought up to date after each quadrennial attestation during the currency of the settlement. If the instructions to this effect are properly observed, we shall have on the expiry of the settlement an up-to-date representation of every village. The tracing-cloth maps are known as the *part-tahsil*. They have been rolled round thin wands and deposited in narrow bags of linen, tied with tape. It is hoped that this will ensure their being kept clean and prevent the tracing cloth from cracking. The *patwari's* and tahsil copies of the map contain not only the *karukans* recorded during the process of correction, but also the *karukans* of unaltered fields copied from the maps of last settlement. Officers of the Canal Department have taken reproductions of the tahsil maps of all canal irrigated villages.

27. The index-maps of last settlement were on a scale of 160 *karams* or

Index maps.

800 feet to the inch. New maps on the same scale have been prepared for the

fourteen villages remeasured on the square system, and in other cases the old map has been corrected and brought up-to-date. One copy for each village has been filed in the district record-room. The *patwaris*, whose field maps are now on long cloth, do not require index maps. These remarks do not apply to riverain estates, of which new index maps on the same scale have been prepared by the mapper at head-quarters. They show the Survey Department's squares only, as the mapper was able by the use of scientific drawing instruments to accomplish what was beyond the *patwari's* capacity, and to fit the *pakka* portion of each village on to the Survey Department squares. Three copies of the index maps of such villages were made,—one for record at head-quarters, one for use by the *patwari* as a guide when squares have to be laid down for dialuvion measurements, and one for the Survey Department. The officers of this department intimated that they did not require index maps of any but riverain estates, as the boundaries of other villages had not been changed since last settlement.

No *mujmili* map of the district has been compiled, as it was ascertained that the Survey Department had nearly completed revised one-inch sheets for this district, and will soon be able to supply district maps showing village boundaries and all other details that would ordinarily appear in a *mujmili* map. The latter would thus have served no useful purpose.

The record-of-rights.

28. In addition to the maps the new standing record-of-rights contains the following documents:—

(i) *The genealogical table*.—This has been drawn up on a continuous sheet of paper for each village. A copy was prepared of the table of last settlement and this was checked, corrected and brought up-to-date on the spot. The entries in it were, however, only carried back for four generations from the present owners; for further particulars a reference will have to be made to the tables of previous settlements. The copy actually amended has in all cases been filed as part of the standing record, but when it was obscured by a large number of erasures and corrections, a fair copy has been added.

These tables have been placed in a separate portfolio for each village. The other documents enumerated below have been bound up in one or more volumes, according to the size of the village. In some large estates seven or eight volumes were necessary.

(ii) *A preliminary proceeding* citing the notification of the Local Government sanctioning the re-settlement.

(iii) *Index of field numbers*.

(iv) *Jamabandi*.—This is an exact copy of the *khataunis* compiled during measurement, which had been subjected to exhaustive checks. The *jamabandi* was generally prepared immediately after the Naib-tahsildar had completed his final attestation and is thus the *jamabandi* for the year of measurement. In riverain estates "the year of measurement" in this connection means the year in which the map of the *pakka* portion was corrected, as explained in paragraph 25. The few changes that occurred between the date of attestation and the announcement of the new assessment were entered as mutations and given effect to in the *bachh*.

(v) *Statement of revenue assignments*.—This was drawn up at the same time as the *jamabandi*, amendments being subsequently made where necessary after the decision of *mafî* revision cases.

(vi) *Statement of rights in wells*.—This is a reproduction, with the necessary corrections and additions, of the careful and elaborate document compiled at last settlement. It was prepared during the progress of measurements, but the depth of all wells was ascertained and recorded in March 1912 for the whole of Tarn Taran and Amritsar Tahsils, and in January 1913 for Ajnala.

(vii) *The village administration paper* is, according to orders, merely a reproduction of the old *wajib-ul-arz*, corrected where necessary and with all references to the village site omitted. Disputes were few, and where they were not amicably settled, the old entry was reproduced. The copy filed with the record-of-rights has been faired from the rough copy on which attestation was carried out in each village by the Extra Assistant Settlement Officer.

(viii) *Statement of village cesses*.—This document is in most estates blank, as no cesses have been approved by the Local Government and few, if any, have been established by judicial decision. The *malba* cess is referred to in the *wajib-ul-arz*, as is also the *thana patti*, a customary collection made by the proprietors on the occasion of weddings from village menials and other non-owners, and a few other cesses known to exist.

- (ix) *Mutations sanctioned since the last quadrennial attestation* have been bound up with the standing records. In very large estates the mutation sheets have been included in a separate volume.
- (x) *Orders of the Settlement Officer determining and distributing the assessment.*—The originals are on the *bachh* files, but an abstract has been included in the standing record. The order determining the assessment details the new demand, the date of introduction, deductions for deferred assessments, protective leases, revenue-free grants and *inams*, and the instalments and dates on which they are payable. The distributing order refers to the old and new methods of distribution and gives all necessary details regarding the latter.
- (xi) *The bachh statements.*—In these are incorporated all changes occurring between the completion of the *jamabandi* and the announcement of the new demand, regarding which mutations had been decided. The copy usually placed on the *bachh* file has been bound up with the standing record.

29. The official date of the commencement of settlement operations

Progress of record and measurement work.

was the 30th October 1910, when I

joined the district on my return from

furlough. Part of the staff had arrived before that date, but it was not brought up to its full strength till some months later, as several of the officials posted to this district from other settlements took leave before joining. Some time was wasted, as I have already explained, owing to the delay in arriving at a decision regarding the method of map correction, and the progress of work was seriously retarded by the census of March 1911. Field work was brought to a practically complete standstill for over a month, as all *patwaris* and most of the *kanungos* were employed as enumerators or supervisors, and the Settlement Officer was in general charge of census operations throughout the district. Moreover, several of the most efficient *kanungos* were subsequently lent to the abstraction office at Lahore, and were consequently absent from their circles for some months. In spite of these drawbacks all record and measurement work in Tarn Taran and Amritsar, where operations were started simultaneously, was completed within the period of two years allowed, and at the end of September 1912 the staff of these two tahsils was substantially reduced. Thereafter only the Tahsildar, two Naib-tahsildars and a few *kanungos* were retained in each tahsil for work connected with the announcement and distribution of the new demand. The same rate of progress was maintained in Ajnala, where field work was commenced in October 1911, and completed two years later. Very few temporary *patwaris* were employed, the total number at no time exceeding a dozen in the whole district.

For these results the staff is, I venture to think, entitled to considerable credit. In the revised schedule submitted with his letter No. 3005, dated 10th August 1910, the Settlement Commissioner estimated that the resettlement would occupy $3\frac{1}{2}$ years and would cost Rs. $3\frac{1}{2}$ lakhs. But this estimate was framed on the anticipation that in a large proportion of villages it would be "possible to accept the existing maps without correction and to have no new *jamabandis*, but merely revised editions of the old ones." The Settlement Commissioner added that if this expectation was not realized he did not think the cost of the settlement could be reduced below Rs. $4\frac{1}{2}$ lakhs. As a matter of fact in every single village remeasurement or map correction has been carried out and a new *jamabandi* drawn up. The system of map correction followed in the vast majority of villages differed from that prescribed in Appendix *XXI* of the Settlement Manual only in two minor respects, firstly the omission of *karukans* for unaltered fields on the *part-sarkar*, and secondly the omission of entries regarding such fields in the field book. Nevertheless both the cost and duration of the settlement have been kept well within the limits of the revised estimate. This result could not have been attained, had not

the subordinate staff loyally followed the example of single-minded and untiring devotion to duty set by the Extra Assistant Settlement Officer, to whom after the first year the supervision of all record and survey work was delegated.

30. To the same officer, and also to the three Tahsildars and numerous Naib-tahsildars, great credit is due Accuracy of the record-of-rights. for the high standard of accuracy which may fairly be claimed for the new record. I trust I may be pardoned for referring in this connection to an inspection note of May 1913 by the Director of Land Records. He had then inspected the work in several villages of Ajnala and Amritsar tahsils, having visited Tarn Taran and other parts of Amritsar in the previous year. In his note the Director expressed the opinion that the record work of this settlement, then approaching completion, was "superior in accuracy to that of any current settlement and attained a very high pitch indeed. The extreme accuracy of Mr. Grant's record and the very high standard demanded * * * * * at this revision are responsible for this result. The three Tahsildars are exceptionally good men." I would include in this praise a majority of the Naib-tahsildars and *kanungos*. With the simplified method of map correction adopted the supervising staff had to work at high pressure to keep pace with the *patwaris*, and if the same procedure is followed in any future settlements I would suggest that a somewhat stronger staff of Naib-tahsildars and *kanungos* should be employed. I found that it was impossible for a single Tahsildar to attest all villages in his tahsil within a reasonable time after the completion of field work, and attestation by certain selected Naib-tahsildars was consequently accepted as final.

31. New village note-books have been started in each estate from the year in which the new record was completed. The abstract note-books of last settlement have been rebound and made over to the custody of the district *kanungo*. They now contain—

- (a) Abstract statistics for each year between the last and the present settlements.
- (b) A copy of Mr. Grant's assessment note, and in a few cases notes subsequently recorded by the Deputy Commissioner or Revenue Assistant.
- (c) A sketch map of the village.
- (d) A table containing the chief statistics bearing on the latest assessment of the village.
- (e) A second table showing the theoretical Government demand by various standards. On this I have recorded at the time of announcement a brief note of the new demand, giving details of the amount assessed as *nahri parta* or *abiana* on wells, and of the amount of progressive enhancements and protective leases.
- (f) The inspection notes recorded during the present settlement. A few blank pages have been added for notes by the Deputy Commissioner or next Settlement Officer.
- (g) A revised form for entering the principal statistics of the next thirty years, headed in each column by the standard or settlement entry. The amounts of instalments due with each harvest have been noted.

The *sadr kanungo* will be responsible for the maintenance of these books, and if the entries are carefully and methodically made, they should be of great assistance to the Collector and his assistants.

32. At last settlement all but two villages on the Ravi had fixed boundaries, and in these two a permanent boundary with Sialkot was laid down Determination of boundaries.

by Mr. (now Sir Edward) MacLagan in 1903. The boundary with Kapurthala State was formerly fixed every year in accordance with special rules, but in 1902 a permanent boundary was demarcated by Mr. B. H. Bird as the representative of the Punjab Government and Diwan Hari Chand on behalf of the Kapurthala Darbar. No special delimitation of boundaries was necessary during the course of the present settlement. All that was done was to reconcile discrepancies in the maps of adjoining riverain villages discovered in the course of the Survey Department's traverse, and elsewhere to compare during the progress of map correction in border villages the boundaries shown in the Amritsar maps with those of contiguous villages in the neighbouring district. In no cases were there actual disputes between the proprietors as to the position of the boundary. Except on the borders of the district no comparison of village boundaries was made, beyond that required by the second test mentioned in Appendix XXI of the Settlement Manual, as the Financial Commissioner (Sir James Douie) decided that none was necessary where there was no dispute.

33. The existing trijunction pillars were generally of bricks and mortar and many were in a bad state of repair.

Tri-junction pillars.

These have been replaced where necessary by stone pillars, measuring $1\frac{1}{2}$ by $1\frac{1}{2}$ by 3 feet, obtained from the quarries at Taraki : 1,627 such pillars were delivered at the villages at a cost of Rs. 10-4-0 each, the price being recovered from the zamindars. They make good landmarks and should last practically for ever. Small stone pillars have been fixed at each end of the base lines of the fourteen estates remeasured.

34. The number of mutations attested from the commencement of settlement operations up to the end of 1913 was as follows :—

Tarn Taran	...	...	...	61,650
Amritsar	...	...	...	51,267
Ajuala	...	...	...	42,331
		Total	...	155,248

Mutation work is always heavy in this densely populated district, and it is impossible for the ordinary staff to cope with it. All *kanungos* have lately been empowered to attest cases of undisputed inheritance in favour of direct male heirs, but even with this assistance the services of a special Assistant Collector will be required from time to time if the records are to be kept really up-to-date between settlements.

The following cases were disposed of between 1st October 1910 and 31st December 1913 :—

Rent	...	...	...	135
Criminal	...	...	...	32
Partition	...	...	...	1,019
Lambardari	...	...	...	1,061
Patwari and kanungo	...	...	...	1,452
Boundary	...	...	...	1,227
Mafi	...	...	...	1,054
Appeals	...	...	...	230
		Total	...	6,210

In addition to the above some 2,800 miscellaneous Revenue Officer's cases were decided. The pending file of cases of all kinds has now been reduced to very small dimensions, and it is hoped that it will be entirely cleared off before settlement operations close.

CHAPTER IV.—REVISION OF THE ASSESSMENT.

35. In one respect the re-assessment of Amritsar has been unique

Orders of the Government of India preliminary to re-assessment. among recent Punjab settlements. It was originally intended that operations should start at the end of the summer

of 1909, and proposals to this effect were submitted to the Government of India with the usual forecast report in July of that year. In their reply, No. 1220—349-2, dated the 28th October 1909, the Government of India called attention to the great discrepancies between the various estimates of the probable enhancement of revenue. That of the Deputy Commissioner and Commissioner was Rs. 1,60,000, the Settlement Commissioner's forecast was Rs. 3,40,000, and the Lieutenant-Governor considered that an enhancement of Rs. 3,00,000 could be safely relied upon. The Government of India were of opinion that, unless definite instructions to ensure moderation were issued before operations commenced, an assessment on the half net assets principle would lead to large enhancements, which it would be as undesirable to impose as it was to assess up to the half net assets standard 20 years previously. Without such instructions the Settlement Officer might be under considerable inducement to enhance far beyond the forecasts submitted. Further, the Government of India did not consider it advisable that the resettlement of Amritsar should be commenced till a decision had been arrived at regarding the general principles to be followed in assessing canal-irrigated lands. This question had already been the subject of discussion with the Local Government in connection with the Ludhiana and Rohtak settlements.

The receipt of these orders made it necessary to defer the starting of settlement operations till October 1910. In the meanwhile the Local Government, in their letter No. 895 S., dated 29th June 1910, informed the Government of India that the Lieutenant-Governor recognized the danger that the assessment proposed by the Settlement Officer might exceed the estimates framed in the forecast, but he was confident that the practical limit to the new demand lay in the amount of enhancement which it would be fair and politic to take; it would certainly be impossible to take anything approaching the half net assets standard. The Financial Commissioner saw no objection to an order that the increase, including any enhancement of occupiers' rates, should not exceed 25 per cent., but the Lieutenant-Governor doubted the necessity for any such limitation. As regards the assessment of canal-irrigated lands, it was recommended that the fixed *nahri parta* should be maintained. Certain minor changes were suggested in the schedule of occupiers' rates, but the present schedule was to be left without serious alteration, no term being fixed for its duration. The letter concluded with an allusion to the "most unusual step" taken by the Government of India in postponing the Amritsar settlement, and to the "considerable doubt and unsettlement as to the intentions of Government" which this action had caused in the minds of the people of the Central Punjab. It was stated to be essential in order to prevent further misconception that the settlement should not be further postponed.

The reply of the Government of India was contained in their letter No. 986, dated 14th September 1910. They accepted the forecast of an enhancement of about Rs. 3 lakhs or 23½ per cent., but gave instructions that the total increase permissible in the district should be limited to 25 per cent. of the existing demand. They agreed to a stipulation, which had been suggested by the Local Government, that any enhancement of the revenue of a village exceeding 50 per cent. should not be announced until it was specially sanctioned by the Financial Commissioner. In regard to the assessment of canal-irrigated land, the Government of India accepted the proposal that the fixed *nahri parta* system should be maintained, with provisions for variation in the case of marked changes in the area irrigated, and that no considerable alterations should be made in the schedule of occupiers' rates. The schedule was not to be guaranteed for the term of settlement. Any minor changes proposed in the schedule were to be effected in such a way as not to increase the total incidence of the water-rates at present levied. The letter further

expressed the assurance of the Government of India that the Local Government would give full weight to every consideration tending to leniency in the assessment, and conveyed formal sanction to the inception of settlement operations. On receipt of these orders the usual notifications authorising the revision of the assessment and record-of-rights were published in the Gazette of 7th October 1910.

36. It might at first sight appear that the task of the assessing officer

Practical effect of these orders. had been simplified by the limitations imposed by the Government of India.

Indeed I understand that the Lieutenant-Governor (Sir Louis Dane) was disposed to think that a detailed inspection of villages could be dispensed with and an automatic enhancement of 25 per cent. taken in each estate. No official record exists of this project, which was apparently abandoned as impracticable after some tentative enquiries by the local officers during the summer of 1910. I received no instructions to depart from the ordinary methods and principles of assessment, and it was clearly the intention both of the Supreme and Local Governments that the full theoretical demand should be ascertained in the usual way. A short study of the statistics of last settlement and of the present circumstances of the tract satisfied me that an enhancement of 25 per cent. would represent only a small fraction of the increase which Government could legally claim, and that it would be neither unfair nor impolitic to take this amount. Higher than this the orders of the Government of India forbade me to go, and to this extent they were certainly helpful. But they had the serious defect of treating the district, and not the tahsil, as the assessment unit. Thus before definite proposals for the first tahsil re-assessed could be framed, it was necessary to make a close estimate of the probable enhancement in the other two; and the task of writing the first two assessment reports was complicated by the obligation to bear in mind the circumstances of the rest of the district.

37. Government is in theory entitled to impose a tax on land equi-

Method of estimating half net-assets : Assessment circles. equivalent to one-half of the owner's net profits, it being assumed that all land is, or can be, leased to a tenant paying

either in cash or by division of the produce. In the succeeding paragraphs I describe the various processes in the calculation of this theoretical maximum. The first step is the division of the whole tract into more or less homogeneous circles of convenient size, each of which can be treated as an assessment unit. The last Settlement Officer considered that the circles formed in 1865 were inconveniently small and their number excessive. By the combination of adjoining circles Mr. Grant reduced the number to eleven, four each in Amritsar and Ajnala and three in Tarn Taran. Their names are given below :—

Tarn Taran.	Amritsar.	Ajnala.
Upper Manjha.	Bet Bangar.	Nahri.
Central Manjha.	Jandials.	Uthar.
Bet Bangar.	Nahri.	Hither.
	Miran Kot.	Sailab.

The retention of this arrangement without change for the purposes of the present settlement was sanctioned in letter No. 4620, dated 20th May 1911, from the Junior Secretary to the Financial Commissioners, as no physical changes of any importance had occurred. The statistics in the assessment reports consequently deal with these circles. But in paragraph 11 of the Amritsar report I drew attention to certain imperfections in the arrangements of that tahsil, and suggested that it would have been preferable if the unwieldy

Jandiala circle had been reduced in size by throwing into the Bet Bangar all villages watered by the Sobraon branch of the canal, and into the Nahri circle all those irrigated by the main branch. The Jandiala circle would thus have been limited to the tract lying between two well-marked natural drainage lines, the Patti Rohi and Kasur Nala, and would have included no canal irrigation beyond the small area watered by the Kasur branch close to Jandiala town. The Financial Commissioner ordered that these changes should be carried out on the conclusion of the settlement, and that the circle note-books should be prepared in accordance with the new circles for the benefit of the next Settlement Officer. He further directed that the large estate of Amritsar *Khas* and five adjoining suburban villages should be taken from the Nahri and formed into a separate circle, as owing to their peculiar circumstances I had been obliged to treat them as a distinct unit in assessing. These changes have now been carried out and their effect is shown below :—

Assessment circles, Amritsar tahsil.

Name.	NUMBER OF ESTATES.	
	Former.	Present.
Bet Bangar	67	83
Jandiala	199	124
Nahri ...	82	132
Suburban	...	6
Mirankot	29	29
Total	377	377

For the convenience of the next Settlement Officer the principal statistics for these circles as re-arranged have been grouped together in appendix II to this report.

A small exchange of estates will probably be effected between the Sailab circle of Ajnala and the Raya tahsil of Sialkot. Two Ajnala villages now lie wholly on the right bank of the Ravi, and five Sialkot villages on the left bank. The Settlement Officer of Sialkot has suggested that the district boundaries should be re-adjusted so as to include these estates within the circles to which by their situation they should naturally belong. This suggestion is in accordance with the wishes of the people, and I have agreed to it, stipulating that the change should be effected after all the villages concerned had been re-assessed, and that the villages transferred should be subject to the di-alluvion rules of their new districts. The Settlement Officer of Sialkot is to send up the proposal as soon as the new demand has been announced in Raya, but sanction is not likely to be received before this report is completed. The change, if sanctioned, will have the effect of increasing the number of estates in the Ajnala Sailab circle by three and will involve the alteration of the *hadbast* numbering throughout the tahsil.

38. The next stage in the evolution of the theoretical revenue is the classification of soils.

and the expense involved in its cultivation. The following classification was sanctioned by the Financial Commissioners in their letter No. 3086, dated 31st March 1911 :—

Chahi.—Land regularly irrigated from a well. In case of doubt if a field is shown by the *khasra girdawari* to have been so irrigated in two or more out of the last eight harvests, it has been recorded as *chahi*.

Nahri.—Land regularly irrigated from the Bari Doab Canal, i.e., in two or more out of the last eight harvests, provided that such land does not come within the definition of *chahi*.

Abi.—Land watered from tanks, *jhils*, ponds or drainage channels.

Sailab.—Land usually flooded in the rains by the Beas, Ravi or Sakki, or their branches, or land near these rivers which is always moist.

Barani.—All cultivation not included in the above classes.

The classes are the same as those adopted at last settlement, but certain amendments have been made in the definitions. These are explained in paragraph 12 of the Tarn Taran assessment report. Uncultivated land is defined by rule as new waste, old waste or unculturable.

39. The whole tract having been divided into assessment circles and the various soils classified, it is a simple matter to calculate the maximum demand, if we assume that cash rents are paid on the total cultivated area.

Actually 15 per cent. of the cultivation in Tarn Taran, 23 per cent. in Amritsar and 13 per cent. in Ajnala is leased to tenants paying in cash, excluding those who pay merely the revenue demand with or without an additional *malikana*. The proportion is sufficiently high to make such rents a reliable guide for assessment purposes, though obviously any estimate based on them must be accepted with more caution in Tarn Taran and Ajnala than in Amritsar. In the two former tahsils the area under cash rents is less than at last settlement, but it is slightly larger in Amritsar, where there is a higher proportion of unirrigated land and consequently more inducement for the landlord to take the less speculative form of rent. I have already noted that on irrigated soils there is a growing tendency to insist on payment by a share of the produce. In all parts of the district cash rents have risen last settlement. The extent of the rise may be calculated in various ways, to which I have alluded in paragraph 36 of the Ajnala assessment report. One method gives the advance as about 66 per cent. in Tarn Taran, 39 per cent. in Amritsar and 25 per cent. in Ajnala. By another method slightly different results are obtained, but those given above may be accepted as approximately accurate. The average rental per acre of ordinary cultivated land varies from about Rs. 14 per annum for the best *nahri* fields to Rs. 5 for inferior *barani*. Rents for the highly manured orchards and market gardens in the neighbourhood of the city are abnormally high and have been excluded in calculating these averages. Such lands fetch at least Rs. 35 or Rs. 40 per acre annually, and rents as high as Rs. 60 or Rs. 70 are by no means uncommon. Rents are invariably collected in full whether the field is sown or left fallow, and remissions for a failure of the crop are seldom allowed.

For a further analysis of cash rents, and in particular for an account of the methods employed in their ascertainment and in excluding all rents considered to be abnormal, a reference may be made to the paragraphs of the various assessment reports noted in the margin.

Tarn Taran,—40, 50, 51.
Amritsar,—38, 49.
Ajnala,—36, 45.

It will suffice here to record that the maximum theoretical demand based on these rents was calculated to be—

	Rs.
In Tarn Taran	... ... ... 11,17,740
In Amritsar	... ... ... 12,31,679
In Ajnala	... ... ... 6,32,139
 Total	 ... 29,81,558

40. I return now to the estimate based on rents in kind, the next stage in which is to decide what area of each class of crops may be expected to reach maturity in a normal year. For this purpose it was necessary to select a

The average matured area.

series of years of which the average matured area, as exhibited in the crop returns, could be accepted as normal. The years selected with the approval of the Financial Commissioner for all tahsils were the quinquennium from *rabi* 1904 to *rabi* 1910, both inclusive, omitting the *rabi* of 1906 and both harvests of the famine year 1907-08. These seasons, which are described in detail in paragraph 32 of the Tarn Taran Assessment Report, give an average area of 843,962 acres of harvested crops in the whole district, 246,668 in the *kharif* and 597,294 in the *rabi*.

41. We have next to estimate the gross value of the produce, which depends on two factors, the outturn per acre and the selling price per maund.

Outturn of crops.
The yields assumed were based partly on numerous crop experiments conducted by the settlement staff, partly on observation and enquiry from intelligent cultivators and partly on those assumed at last settlement and in the adjoining district of Gurdaspur. They are exhibited in detail in the statements appended to the assessment reports, and were accepted without criticism by the Financial Commissioner. The correct appraisement of the outturn is the most speculative process of the produce estimate, as the results of crop experiments are often extraordinarily divergent, and there is inevitably a wide margin for error in any assumption that has to be applied to many thousands of acres.

Prices.

42. The commutation prices sanctioned for this settlement are stated below in annas per maund :—

Wheat, irrigated	...	...	...	...	36
Wheat, unirrigated	...	...	...	...	34
Barley	...	...	...	...	22
Gram	...	...	...	...	26
Mixed wheat and gram	...	...	...	...	28
Toria	...	...	...	...	42
Sarshaf	...	...	...	...	48
Massar	...	...	...	...	28
Rice	...	...	...	...	28
Maize	...	...	...	...	25
Moth	...	...	...	...	30
Mung	...	...	...	...	38
Mash	...	...	...	...	38
Sugarcane (gur)	...	...	...	...	50
Cotton	...	...	...	...	76
Til	...	...	...	...	64

These represent an advance of 43 per cent. in Tarn Taran and Ajnala and 41 per cent. in Amritsar on the prices assessed at last settlement. The comparison being between the two sets of assumptions is of course fallacious, but it represents accurately enough the actual rise in the value of agricultural produce in the last twenty years. It would perhaps have been more equitable to have assumed a separate set of prices for Ajnala, where owing to the absence of markets and poor communications the important staples are often cheaper than in other parts of the district. But allowance has been made for this in the estimate of the "true" half net assets.

43. The average matured area, rates of outturn and commutation prices having been determined, it is a

Deductions for pay of menials and reapers.

matter of simple mathematical calcula-

tion to fix the gross value of the produce. But before division between the tenant and landlord certain deductions are always made from the common heap as payments to the various menials who have assisted the tenant in sowing, ploughing, reaping and winnowing. In addition to these customary payments, the cultivator has generally to employ hired labour to assist in reaping the spring cereals. Wheat, gram and barley all ripen nearly simultaneously, and it is a matter of urgency to get the cutting and threshing

completed before the duststorms that usually mark the end of April. The menial population has been reduced in recent years by plague and emigration to the canal colonies or elsewhere, and the labour problem is continually becoming more acute. The customary dues of village menials and the wages of hired reapers are always paid in kind, and the cost is thus shared by landlord and tenant. The deductions allowed on this account from the gross value of

Taran Taran,—44, 45.
Amritsar,—43, 44.
Ajnala,—40, 41.

the produce vary from circle to circle. They are discussed in detail in the assessment reports, the relevant paragraphs of which are noted in the margin.

44. What remains of the produce is then divided between landlord and tenant, usually but not always in equal shares. The landlord's share practically never exceeds one-half, but he is often content with two-fifths or even one-third on *chahi* fields where the outturn is specially valuable and the expense of cultivation heavy. A smaller share than one-third is rarely accepted, and only when the soil is exceptionally poor or the landlord an absentee. The straw is generally divided in the same proportion as the grain; but there are occasional exceptions to this rule. For a detailed analysis of the

Taran Taran,—39, 46.
Amritsar,—37, 45.
Ajnala,—35, 42.

share, both of grain and straw, received by the landlord, a reference may be made to the marginally-noted paragraphs of the assessment reports, where

the method of calculating the value of the straw is also explained.

45. We have now arrived at the owner's gross takings from his land. Deductions for canal charges paid by landlord. But in the case of canal-irrigated land it is the universal practice for an owner, who takes a share of the produce, to pay an equivalent share of the sum due to Government for occupiers' rates. A proportionate reduction on this account must be made from the gross value of the owner's returns, and this has been done in all circles in the manner explained in paragraph 47 of the Tarn Taran assessment report.

46. The owner's net profits having thus been ascertained, the maximum theoretical revenue is one-half of this. The demand calculated by these methods for each tahsil was as follows:—

	Rs.
Tarn Taran	12,70,441
Amritsar	14,85,500
Ajnala	7,98,190
Total	35,54,131

47. It will be noticed that the two estimates vary considerably, that based on kind rents being substantially higher than that based on cash rents. The former contained so many speculative elements that it was clearly less

reliable than the calculation based on actually ascertained cash rents. On the other hand, allowance had to be made for the fact that, speaking generally, land leased on a cash rental is usually rather below the average in fertility. These considerations applied with varying force to the different assessment circles. On a careful review of the circumstances of all circles, I came to the conclusion that the full theoretical assessment for each tahsil would be approximately the sums noted in column 4 of the statement that follows. My estimates were all accepted without modification by the Financial Commissioner, though

The true half net-assets.
Comparison with demand actually imposed.

in the case of Tarn Taran they were criticized as probably erring on the side of caution. To illustrate the extreme leniency of the new assessment, figures for the demand actually imposed have been added in the statement:—

1	2	3	4	5	6
Tahsil.	HALF NET ASSETS ESTIMATE			DEMAND IMPOSED.	
	Based on cash rents.	Based on rents in kind.	Accepted as true.	Amount.	Percentage of true half assets.
Tarn Taran	11,17,740	12,70,441	11,74,000	5,39,816 46
Amritsar	12,31,679	14,85,500	12,44,000	7,04,771 57
Ajnala	6,32,139	7,98,190	7,25,000	3,50,394 48
District	...	29,81,558	35,54,131	31,43,000	15,97,981 51

Government has thus taken only a shade over half of the revenue legally claimable. As between the various tahsils the pitch of the assessment is still unduly low in Tarn Taran, but the highest percentage of enhancement was taken in this tahsil where the political considerations in favour of a lenient demand apply with peculiar force. Ajnala too would appear to have been lightly treated, but I am now disposed to think that my estimate of its full theoretical assessment was relatively rather high. It might perhaps have been reduced by a quarter or even half a lakh.

48. The assessment of each circle will now be noticed in detail. Tarn

Assessment of Tarn Taran tahsil :
Upper Manjha circle.

Taran was the first tahsil taken up, as the term of its previous settlement had expired in *rabi* 1911 and it was desir-

able to announce the new demand as soon as possible. A few villages were inspected in the summers of 1911 and 1912 and the majority in the intervening cold weather. The assessment report was submitted in July 1912 and the new revenue introduced with effect from *kharif* of that year. All my proposals were accepted without modification.

The Upper Manjha is on the whole the best circle in the tahsil. It comprises some of the most fertile villages, and rents are slightly higher than in the Central Manjha. But great damage had been done by the floods of 1908 and 1909, and the value of land showed a smaller advance since last settlement than in the rest of the tahsil. I considered it equitable to retain the assessment at a higher pitch than in the Central Manjha, but to take a lower percentage of enhancement. The effect of the re-assessment is shown below :—

	Rs.
Old demand	1,91,538
By proposed rates	2,45,298
Sanctioned	2,45,000
Imposed	2,43,289
Increase per cent.	27

Incidence of new demand—

	Rs. A. P.
Per acre cultivated	1 15 0
Per acre cropped	1 11 8

49. This circle is slightly inferior in fertility to the Upper Manjha and the methods of cultivation are inclined to be slovenly. But military service is more popular than in any other part of the district, and the people are exceed-

ingly prosperous. Canal irrigation had been greatly extended in recent years and the value of land has risen enormously. The incidence of the old demand was almost ludicrously low in many estates, and a large enhancement was clearly justifiable :—

	Rs.
Old demand ...	... 1,88,920
By proposed rates ...	... 2,64,283
Sanctioned ...	... 2,64,000
Imposed ...	... 2,59,600
Increase per cent.	... 37
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated ...	... 1 9 3
Per acre cropped... ...	... 1 6 8

Even now the circle remains under-assessed relatively to the Upper Manjha, but the enhancement taken was as high as was considered politic. In some villages the new demand was nearly or quite double the old.

50. This is a small circle consisting of a strip of country fronting the Beas. The proprietary body is somewhat weak, and great damage had been done since last settlement by the spread of *kallar* in the alluvial land below the high bank of the river. The cultivated area has declined in consequence by nearly 9 per cent. and only a very little good *sailab* land is left. A large proportion of the land above the high bank is stony and intersected by ravines. Wells are deep and canal irrigation limited. On these grounds a much smaller enhancement was required than in the two Manjha circles:—

	Rs.
Old demand ...	... 32,194
By proposed rates ...	... 36,929
Sanctioned ...	... 37,000
Imposed ...	... 36,927
Increase per cent.	... 15
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated ...	... 1 6 2
Per acre cropped... ...	... 1 3 4

51. The inspection of the 377 estates in this tahsil was completed early in the hot weather of 1912 and the report was submitted at the end of August. My proposals were accepted

Assessment of Amritsar tahsil:
Bet Bangar circle.

practically without modification by the Financial Commissioner, but the Local Government, before sanctioning the announcement of the new revenue, referred to the Government of India a question regarding the interpretation of the orders limiting the enhancement to 25 per cent. It was asked if the limitation applied to the initial or to the ultimate increase. The Government of India replied that it might be applied to the ultimate increase, provided the total assessment of the district did not exceed Rs. 16,07,000, and I was consequently directed to take Rs. 11,000 more than I had proposed in Amritsar tahsil. I cannot help regretting this decision, which had the effect of perpetuating, in the relatively higher pitch of the assessment in Amritsar, an inequity that I had endeavoured to correct. If any additional enhancement was to be imposed, it should in my opinion have been taken in Tarn Taran, but the orders did not reach me till some months after the new demand for that tahsil had been announced. In Amritsar the new assessment took effect from *rabi* 1913.

The Bet Bangar circle had been greatly benefited by the opening of additional distributaries from the Sobraon branch since last settlement. It is a much larger and stronger tract than the circle of the same name in Tarn Taran; cultivation in the Bet has always been very limited in extent, but the Bangar is mainly a light but fertile loam. The owners are nearly all Jats, who enlist freely in the Army. The only weak points are the small holdings and the comparatively remote situation in one corner of the tahsil:—

	Rs.
Old demand ...	77,665
Demand by sanctioned rates ...	95,420
Imposed ...	96,175
Increase per cent. ...	24
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated ...	2 0 6
Per acre cropped ...	1 12 8

Of the additional enhancement of Rs. 11,000 sanctioned by the Local Government, Rs. 1,200 were allotted to this circle.

52. This was before re-arrangement a very large circle with considerable diversity of soil. It is crossed by the Jandiala circle. main sandridge, on which the crops are always sparse and precarious. Canal irrigation from the Kasur branch is limited to a few villages on the southern border and is confined to the *kharif* harvest, but the circle contained a number of villages, west of the Kasur *nala*, which received perennial irrigation from the main canal. Apart from these, now transferred to the Nahri circle, most estates depend mainly on their wells. Cultivation had increased since settlement by about 1,000 acres. Government directed me to take Rs. 6,000 above the demand brought out by the sanctioned rates in this circle:—

	Rs.
Old demand ...	2,61,008
Demand by sanctioned rates ...	3,33,019
Imposed ...	3,38,100
Increase per cent. ...	30
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated ...	2 5 5
Per acre cropped ...	2 1 10

53. This is the most profusely irrigated, closely cultivated and densely Nahri circle. populated tract in the district. It possesses exceptional facilities in the way

of communications and markets, and the owners have consequently received the full benefit of the rise in rents, prices and land values. On the other hand, the tract has not yet recovered from the effects of the disastrous floods of 1908 and 1909. Cultivation has declined by 5 per cent. since last settlement and holdings are very small, while in many villages water-logging exists or is imminent. Moreover, any enhancement in the schedule of canal charges would press more heavily on this circle than elsewhere. There were thus good reasons for moderation in assessment. Of the additional increase of Rs. 11,000 ordered by Government, Rs. 1,900 were allotted to this circle:—

	Rs.
Old demand ...	1,28,524
Demand by sanctioned rates ...	1,61,845
Imposed ...	1,62,600
Increase per cent. ...	27
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated ...	2 13 3
Per acre cropped ...	2 6 3

54. The six estates of Amritsar *Khas*, Sultanwind, Tung Pain, Tung Bala, Bharariwal and Mulo Chak have now been made into a separate circle, as Suburban circle.

I found it necessary to treat them in this way during assessment. The two first named cover a huge area, and following Mr. Grant's example I sub-divided Sultanwind into two, and Amritsar into no less than twelve, separate *chaks*. Owing to their proximity to the city, the value of land and the pitch of rents in all six estates are exceptionally high. A large area is under orchards and market gardens, from which the annual profits are enormous. The *ijara* form of tenure, described in paragraph 39 of the assessment report, is common. Many of the owners in this circle, especially in Amritsar *Khas*, belong to the trading classes and on all accounts a very large enhancement of revenue was indicated. No differential soil rates were framed, as each estate, and in Amritsar practically each holding, had to be assessed separately on its resources as shown by the cash rents. But the demand proposed would have had an incidence of approximately Rs. 6-4-0 per cultivated area. In Amritsar a considerable area had been built over since last settlement, but was still legally liable to pay land revenue. Of this I proposed to exempt certain lands devoted to purposes of public utility, and on the balance to impose an assessment of Rs. 5 per acre, the rate sanctioned at last settlement for bungalows and compounds in the civil lines. But the Financial Commissioner enhanced this to Rs. 6-4-0 an acre, on the ground that the land would be able to pay this amount if it had been devoted to agriculture instead of building. Government ordered an additional sum of Rs. 1,300 to be taken in this circle—

	Rs.
Old demand ...	40,767
Proposed demand ...	62,500
Imposed ...	63,821
Increase per cent. ...	57
Incidence of new demand—	
Per acre cultivated ...	6 6 4
Per acre cropped ...	4 14 10

55. This small circle was assessed by the Extra Assistant Settlement Officer. It is distinctly the weakest in Mirankot circle.

the tahsil; the soil is poor, canal irrigation scanty and uncertain, and the proprietary body a good deal involved in debt. Cultivation had declined and leniency in assessment was desirable. The demand approved by the Financial Commissioner was enhanced by Government to the extent of Rs. 600 :—

	Rs.
Old demand ...	39,450
By sanctioned rates ...	46,944
Sanctioned by Financial Commissioner ...	46,500
Imposed ...	47,075
Increase per cent. ...	19
Incidence of new demand—	
Per acre cultivated ...	2 4 2
Per acre cropped ...	2 3 10

56. Ajnala was inspected in the winter of 1912-13 and the report submitted in June 1913. The new demand announced in the other two tahsils amount-

ed to Rs. 12,47,587,* and this sum subtracted from the limit of Rs. 16,07,000 laid down by the Government of India gave a maximum enhancement for Ajnala of Rs. 49,222, or a total assessment of Rs. 3,59,413. As this was under half the theoretical demand for the tahsil, my proposals were framed so as to

* The sum stated in paragraph 47 of the Ajnala assessment report is Rs. 12,47,612, but on appeal the Commissioner made a reduction of Rs. 25 in one Amritsar village.

take the whole sum. They were accepted with only one unimportant modification by the Financial Commissioner, but the Lieutenant-Governor (Sir Michael O'Dwyer) considered that there were special grounds for leniency in Ajnala, and while admitting the moderation of the assessment proposed, reduced the enhancement by Rs. 9,000 to Rs. 40,000. The Financial Commissioner was asked to amend the sanctioned soil rates, so as to bring out this amount. The Lieutenant-Governor's reasons for reducing are stated in his review of the assessment report. Special stress was laid on the fact, to which the report had called attention, that the rise in prices had been of little benefit in a tract where there is practically no surplus produce available for export, and was actually a hardship to the poorer cultivator who in bad seasons has to live on credit. The new assessment was introduced from *kharif* 1913.

The Nahri circle resembles the adjoining Amritsar Nahri, being profusely irrigated and closely cultivated. It contains a few bad estates, but most are strong and fertile Jat villages. Rents and the price of land are much higher than in the rest of the tahsil. Cultivation and irrigation both showed a slight decline since last settlement, but I had no hesitation in deciding that a fairly large enhancement could be taken :—

	Rs.
Old demand	... ... ...
Proposed	... ... ...
Sanctioned by Local Government	... ... 1,20,000
Imposed	... ... ... 1,20,125
Increase per cent.	... ... ... 19
Incidence of new demand—	

	Rs. A. P.
Per acre cultivated	... ... 2 12 1
Per acre cropped	... ... 2 4 5

57. This, the largest circle in the tahsil, was assessed by the Extra Assistant Settlement Officer. Though somewhat inferior to the Nahri it is a

Uthar circle. fairly strong tract, four-fifths of its cultivation being irrigated. There are some very fertile and some decidedly weak estates, the latter being mainly those close to the Sakki which are not reached by the canal. Thorough and careful inspection was required. In revenue-paying capacity the circle is in every way stronger than the Hithar and Sailab, so it had to take the bulk of the remaining enhancement possible in the tahsil :—

	Rs.
Old demand	... ... ...
Proposed	... ... ...
Sanctioned by Local Government	... ... 1,31,000
Imposed	... ... ... 1,31,035
Increase per cent.	... ... ... 17
Incidence of new demand—	

	Rs. A. P.
Per acre cultivated	... ... 2 6 3
Per acre cropped	... ... 2 1 10

58. The Hithar is a narrow strip of country on the right bank of the Hithar circle. Sakki, much exposed to floods from that stream and from the Ravi. There is

no canal irrigation, except for a few acres watered by the Kiran canal. Wells are shallow but easily exhausted, and the failure of crops is apt to be serious in a dry year. The soil has little productive capacity and is infested with weeds and *kallar*. For the most part the proprietary body is weak in personnel and much involved in debt. There had frequently been difficulty in collecting the revenue, and any large enhancement was clearly out of the question. But

some improvement was possible by distributing the demand more equitably between villages. In a good many a reduction was allowed:—

	Rs.
Old demand	... ... ... ... 50,365
Proposed	... ... ... ... 54,125
Sanctioned by Local Government	... ... ... ... 52,000
Imposed	... ... ... ... 52,280
Increase per cent.	... ... ... ... 4
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated	... ... ... ... 1 14 7
Per acre cropped	... ... ... ... 1 12 7

59. This is a single line of villages fronting the Ravi. It has suffered greatly in recent years from erosion, the set of the river having been steadily

Sailab circle.
towards its left bank. The cultivated area had declined by no less than one-fifth since last settlement, and many villages had lost nearly all their wells and homesteads. The owners are mainly Musalmans of the weaker agricultural tribes, with miserably small holdings and pitifully impoverished. The soil is naturally light and unfertile and crops are always precarious. Canal irrigation is confined to half a dozen estates lying below the junction of the Sakki and Ravi. Suspensions and remissions of the demand had been necessary in practically every year, and the fiscal history of the tract detailed in paragraph 13 of the assessment report proved conclusively that the old demand was relatively a severe one. Very careful inspection of all estates was necessary, as, though no general enhancement of the demand was possible, circumstances had altered so much owing to encroachment by the river that a redistribution between villages was urgently required. In the few strong Jat villages a small increase has been taken. In most of the remainder the demand has been reduced. In estates subject to river action the *jamas* announced were calculated on the existing cultivated area, which differed in some cases from that recorded at measurement:—

नवायन नमूने	Rs.
Old demand	... ... ... ... 47,134
Proposed	... ... ... ... 47,739
Sanctioned by Financial Commissioner and Local Government	... ... ... ... 47,000
Imposed	... ... ... ... 46,954
Increase per cent.	... ... ... ... Nil.
Incidence of new demand—	
	Rs. A. P.
Per acre cultivated	... ... ... ... 1 11 0
Per acre cropped	... ... ... ... 1 8 10

In this circle the Lieutenant-Governor did not reduce the assessment approved by the Financial Commissioner. The latter had lowered the *barani* rate from Re. 1-6-0 to Re. 1-4-0 per acre, thereby reducing the demand proposed by about Rs. 700.

60. At the time of announcing the new assessment in Ajnala the following amounts of suspended revenue Balances outstanding from last settlement. were still outstanding:—

	Rs.
Uthar circle	... ... ... ... 192
Hithar circle	... ... ... ... 739
Sailab circle	... ... ... ... 3,154
Total	... ... ... ... 4,085

The sanction of the Financial Commissioners to the remission of these arrears was conveyed in their Junior Secretary's letter No. 8513, dated 22nd December 1913. No balances were outstanding in Tarn Taran or Amritsar.

61. Over the whole district the revenue was raised from Rs. 12,70,252 to Rs. 15,97,981, or by 26 per cent. In

Financial results of re-assessment.

Tarn Taran the percentage of enhancement was 31, in Amritsar 29 and in Ajnala 13. The above figures all relate

to the ultimate demand, which is thus well within the limit of Rs. 16,07,000 prescribed by the Government of India. The initial enhancement is Rs. 2,99,104 or less by Rs. 18,459 than 25 per cent. of the old revenue. The tahsil totals are noted below :—

Tahsil.	Old demand.	NEW DEMAND.		;
		Initial.	Ultimate.	
		Rs.	Rs.	
Tarn Taran ...	... 4,12,652	5,26,241	5,89,816	
Amritsar ...	... 5,47,409	6,93,371	7,07,771	
Ajnala ...	... 3,10,191	3,49,744	3,50,804	
District ...	12,70,252	15,69,856	15,97,981	

62. The following statement exhibits the acreage rates sanctioned for the various classes of cultivated land in each assessment circle :—

Tahsil.	Circle.	Chahi.	Nahri.	Abi.	Sailab.	Barani.	
Tarn Taran ...	Upper Manjha ...	... 2 0	2 4	1 6	1 4	1 6	
	Central Manjha ...	... 1 14	1 12	1 4	...	1 4	
	Bet Bangar ...	... 2 0	1 12	1 1	1 4	1 1	
Amritsar ...	Bet Bangar ...	... 2 12	2 2	1 10	3 0	1 10	
	Jandiala ...	... 3 0	2 10	1 10	...	1 10	
	Nahri ...	... 3 4	2 14	2 14	...	1 12	
	Mirsukot ...	... 3 0	2 6	1 6	...	1 6	
Ajnala ...	Nahri ...	... 3 1	2 11	1 10	...	1 10	
	Uthar ...	... 2 13	2 7	1 4	1 4	1 4	
	Hithar ...	... 2 9	1 6	1 6	1 6	1 4	
	Sailab ...	... 2 10	2 0	1 4	1 8	1 4	

As already explained, no special soil rates were framed for the Suburban circle, which has therefore been omitted from the table. The rates given for Ajnala are as adjusted by the Financial Commissioner in consequence of the reduction of Rs. 9,000 ordered by Government. The amount of *abi* land is inconsiderable, and in all circles but one it has been classed with *barani* for assessment purposes. In the Amritsar Nahri the bulk of it is valuable land irrigated with liquid sewage from the city drains. It has therefore been put on the same level as *nahri*. The Municipality imposes a heavy charge for this irrigation. The high rate sanctioned for *sailab* land in the Amritsar Bet

Bangar requires a word of explanation. There are only 425 acres of such land and two-thirds of it are in Sheron Bagha, a fertile estate, where rents are specially high.

63. I have already referred to the orders of the Government of India regarding the assessment of land irrigated by the Upper Bari Doab Canal.

Assessment of canal-irrigated land :
Nahri parta.

They were to the effect that the system of a fixed *nahri parta* was to be maintained and only such minor changes made in the schedule of occupiers' rates as should not have the effect of raising the total incidence of these rates in the district. An interesting account of the origin and principles of the *nahri parta* system, and of the earlier history of taxation generally on this canal, will be found in paragraphs 53 to 62 of the final report of last settlement. In practice *nahri parta* is that part of the fixed assessment which represents the difference between the *barani* and *nahri* soil rates. Thus if in any circle the sanctioned rate for unirrigated land is one rupee per acre, and that for canal-irrigated land is one rupee and eight annas, the *nahri parta* in that circle is eight annas. It is collected with the rest of the fixed demand, but the Irrigation Department receives a book credit for the total sum realized with each harvest. The rate of *nahri parta* varies from circle to circle, and is applied in each village to the area recorded as irrigated during measurement. In village-to-village assessment I was authorized to follow the practice of last settlement and raise or lower the circle rate according to the quality of the land irrigated and the abundance or deficiency of the supply of water. Consequently there is no circle in which the sum actually imposed as *nahri parta* coincides exactly with the result of the application of the circle rate to the area recorded as irrigated. The following statement shows the old and new rates and the total amounts now imposed as *nahri parta*. The transfer of these sums by book credit to the Irrigation Department was sanctioned by the letters of the Punjab Government cited in the last column :—

Tahsil.	Circle.	RATES OF NAHRI PARTA PER ACRE.		Total amount of <i>nahri parta</i> imposed.	Sanctioning letter.
		Old.	New.		
Tarn Taran	Upper Manjha	6	14	42,531	No. 129 R. and A., dated 26th November 1913.
	Central Manjha	5	8	42,581	
	Bet Bangar	5	11	5,170	
	Total Tarn Taran ...	...	...	90,282
Amritsar	Bet Bangar	7	8	13,033	Sanction not yet communicated.
	Jandiala	10	16	4,164	
	Nahri	12	18	35,412	
	Suburban ... ...	...	28	9,231
	Mirankot	4	16	2,614	
	Total Amritsar ...	...	...	64,454
Ajnala	Nahri	12	17	22,671	Ditto.
	Uthar	10	19	17,856	
	Sailab	11	12	578	
	Total Ajnala ...	...	...	41,105
	Total District ...	...	...	1,95,841

(NOTE.—Circles as rearranged after settlement.)

In the Ajnala Hithar there is no irrigation from the Bari Doab Canal, but a small area of about 100 acres is watered by the Kiran cut constructed and maintained by the Gurdaspur District Board. No *nahri parta* has been imposed and the land has been assessed as *barani*. It pays a water-rate of Rs. 2 for each acre irrigated to the District Board. In the six Suburban estates no soil rates were sanctioned and there was consequently no uniform rate of *nahri parta*. The rate was fixed and announced separately for each village or holding. The amount imposed works out at an average of Re. 1-12-0 to each recorded acre of irrigation.

In the year before re-assessment the following sums had been credited to the Irrigation Department on this account :—

				Rs.
Tarn Taran	...	...	...	39,151
Amritsar	...	...	...	46,894
Ajnala	...	...	...	21,806
			District	<hr/> 1,07,851

Consequently the revenues of the Department have been increased by an annual sum of Rs. 87,990 as the result of the settlement.

64. Government has always reserved to itself power to levy *nahri parta*

Rules for the imposition and remission of *nahri parta* during the currency of a settlement.

Similarly where irrigation is cut off or curtailed, a remission of the *parta* can be claimed. These principles are well-known to the people, but no detailed instructions for giving effect to them have hitherto been drawn up, and there has in the past been much remissness in applying them. This defect has now been remedied. New rules have been sanctioned by the Financial Commissioners in their Junior Secretary's letter No. 1709, dated 9th March 1914, and are printed as appendix III to this report. They are based on the rules recently introduced in Gurdaspur, the chief difference being that in Amritsar the village, and not the circle, rate of *nahri parta* will usually apply to extensions of irrigation. Petty changes in the area irrigated are to be disregarded and the assessment is only to be changed where the area affected is considerable. In 50 villages in the Ajnala Nahri and Uthar circles the people have been told that the amount announced as *nahri parta* will be subject to revision after two years, that is in *kharif* 1915. These are villages affected by an extensive remodelling scheme just completed, and it is very doubtful if the area now recorded as *nahri* correctly represents the amount of irrigation they will receive in future.

65. The schedule of occupiers' rates in force on the canal was introduced in 1891 and has not since been altered.

Occupiers' rates.

It is quoted in full in paragraph 23 of the Tarn Taran assessment report and need not be reproduced here. On the average of the five years selected as the basis of the produce estimate the annual sum realized as occupiers' rates from the various tahsils was as noted below :—

				Rs.
Tarn Taran	...	...	...	5,74,157
Amritsar	...	...	...	2,75,633
Ajnala	...	...	...	1,86,463
			Total	<hr/> 10,36,253

Thus the total taxation on the agriculture of the district amounted under the settlement now expired to 23 lakhs of rupees, and under the new settlement will aggregate 26½ lakhs in round figures. In Tarn Taran, where nearly every village receives canal water, the canal dues realized 40 per cent. in excess of the old fixed land revenue.

Certain suggestions for amending the schedule were made in paragraph 57 of the Tarn Taran and paragraph 51 of the 'Amritsar assessment reports. No definite action has, however, yet been taken, and Government has lately decided that the general question of revising the rates is to be postponed till settlement operations in the Lahore district are nearly completed (Punjab Government letter No. 127 Revenue, dated 21st November 1913).

CHAPTER V.—DISTRIBUTION OF THE REVENUE.

66. At last settlement Mr. Grant recorded detailed inspection notes regarding each of the 1,075 estates in the district, and his distribution of the

Village assessments.
demand between them was carefully and equitably made. Nevertheless it was essential that an equally thorough inspection should be carried out during the present re-assessment; otherwise the people would not have been satisfied that sufficient consideration had been given to changes that had occurred in the intervening twenty years. Every village is able to produce arguments for being more lightly assessed than its neighbours: though usually irrelevant and frequently deliberately designed to mislead, such arguments must be listened to. The spread of *kallar*, the curtailment of canal water, the increased cost of cattle and labour were the commonest topics of complaint. Almost invariably allusion was made to the small size of holdings and a petition added for grants of land in the new canal colonies. The people were always given an opportunity of stating their case fully, and in nearly all villages the inspection notes were written in their presence. This is the most arduous and monotonous part of a Settlement Officer's task, but the success of his assessment largely depends on its thorough performance. A short experience convinced me that the project for an automatic enhancement in every estate would have had most unfair results and would have provoked great resentment. In many villages especially those in the Beas and Ravi riverainus and in the tract exposed to water-logging, the decline of cultivation made a four-anna increase impossible. On the other hand, many estates in Tarn Taran and the Amritsar Bet Bangar had received canal irrigation since last settlement, and here enhancements up to, and sometimes above, eight annas in the rupee could easily be justified. In 75 villages—66 in Ajnala, 6 in Tarn Taran and 3 in Amritsar—the old demand was reduced, but the Ajnala Sialab and Hithar were the only circles where reduction on an extensive scale was required. As each village was inspected a rough estimate of its maximum and minimum assessments was framed. The demand actually announced was determined by the employment and comparison of three different standards, *viz.*, the result of applying the sanctioned soil rates, and the two estimates of half net assets based respectively on the prevalent cash and kind rents.

67. I have already alluded to the doubt and uncertainty as to the

Reception of the new assessment.

intentions of Government produced in the minds of the people by the post-

ponement of the settlement in October 1909. Part of the staff had actually joined the district when the postponement was decided on, and their removal gave rise to a belief that no resettlement was to be carried out. When operations were re-started a year later some resentment was felt, and this was reflected in a general inclination to assume a hostile attitude towards the settlement staff. The assistance of *zaildars* and *lambardars*, which is absolutely essential to the rapid completion of survey and record work, was at first grudgingly given. Fortunately this attitude did not last long. The comparatively sophisticated peasant of this district is quick to see the advantages of a careful revision of the record-of-rights, and soon learned to appreciate the desire of the authorities to carry out the revision rapidly and with the minimum of harassment. The leniency of the new assessment when announced was generally recognized. The people had certainly apprehended that a larger enhancement would be taken. In the poorer circles of Ajnala the new demand, which in many cases involved reduction and the remission of outstanding arrears, was greeted with positive acclamation, and many of the *zamindars* frankly admitted their regret for having petitioned Government in the summer of 1910 for a further postponement of the settlement.

Only 10 villages (4 in Tarn Taran and 6 in Amritsar) presented objections under section 52 of the Land Revenue Act to the amount of the assessment. All these were rejected. A few appealed to the Commissioner, but in only one case was the appeal successful. The appellant was an Amritsar barrister, who owns land in Rakh Shikargah. The Commissioner reduced the demand for his holding and for the whole estate by Rs. 25. So far as I am aware no appeals were carried to the Court of the Financial Commissioner.

68. *Bachh* files for each village were prepared at the time of the Internal distribution:

(a) Procedure.

occupancy tenants the method of distribution adopted at last settlement, and to give them time for consultation and decision as to its retention or amendment. All disputed points were thoroughly discussed, and where necessary settled by the intervention of the Tahsildar, on whose tact and power of reconciling conflicting interests the success of this branch of the work primarily depends. The wishes of the owners and occupancy tenants as to the method of distribution were then recorded. At the time of announcing the demand for each village, its *bachh* file was produced. The recorded wishes of the people were explained to the *lambardars* and other share-holders in attendance, and they were asked if they agreed. Any points still in dispute were discussed, and, if no agreement could be arrived at, were decided by myself. The gross new demand, and in canal-irrigated villages the rate and amount of *nahri parta*, were then announced. The total amount agreed on by the owners as the *abiana* on the wells was next mentioned and if I thought it suitable in view of the area recorded as *chahi*, it was sanctioned. If the people had not agreed on the amount of *abiana*, I fixed it.

Thus at every stage the wishes of the people have been consulted, and it may be asserted with confidence that there is general satisfaction at the way in which the demand has been distributed. The best proof of this is that only 42 objections by individual share-holders under section 57 of the Land Revenue Act were presented. 15 of these came from Ajnala and 13 each from Tarn Taran and Amritsar. Most of them dealt with the *abiana* imposed on particular wells and some, which were reasonable, were accepted.

69. The following table shows the system of distribution adopted at this and the last settlement:—

Tahsil.		NUMBER OF VILLAGES IN WHICH THE REVENUE WAS DISTRIBUTED BY			
		Hereditary or customary shares.	An all-round rate.	Differential soil rates.	Total.
Tarn Taran ...	... { Now ...	41	290	23	*354
	... Old ...	66	178	110	
Amritsar ...	... { Now ...	11	316	50	377
	... Old ...	35	273	69	
Ajnala ...	... { Now ...	37	284	21	342
	... Old ...	83	234	25	
District	... { Now ...	89	890	94	*1,073
	... Old ...	184	685	204	

* Excludes two estates owned by Government in Tarn Taran.

The diminishing popularity of the system of distribution on hereditary shares is noticeable. Owing to changes in cultivation and alienations such shares now seldom constitute a true measure of right. It is much more equitable for each share-holder to pay for the land actually in his possession and it is satisfactory that the people generally have been induced to accept this view.

In the 890 estates that adopted an all-round rate the method most commonly employed was to place the total amount announced as *nahri parta* on recorded *nahri* land at the rate sanctioned by me. Only in a few cases was a somewhat lower rate used. It is evident that the people recognize the fairness of our system of assessing canal irrigation. *Chahi* land was treated as unirrigated, the *abiana* being placed in a lump sum on the well-cylinder. This is the most convenient method as it simplifies the calculation of the amount to be deferred in the form of a protective lease on a new well, or to be remitted should a well fall out of use. The gross demand for the village, less the amounts of *nahri parta* and well *abiana*, was then imposed at a uniform rate on all cultivated land, including *nahri*, alike. In a few estates new waste (*banjar judid*) was reckoned as cultivated. It is not strictly accurate to call this system one of distribution by an all-round rate. A genuine all-round rate, that is when no regard is paid to anything but the gross demand which is spread over all cultivation alike, was only used in about a dozen villages. The people were warned that under this system no protective lease or remission for wells falling out of use could be granted.

Differential soil rates were much less popular than at last settlement. They have been used only in villages with a large area of *tibba* or sandy soil which the people wished to differentiate from the rest of the unirrigated land, or where it was desired to make a distinction between *sailab* and *barani*. Occasionally a low rate of one or two annas an acre was imposed on waste land.

In a few estates the pitch of cash rents and the fertility of the soil differed so much in the various *tarafs* or *pattis* that the demand for each was fixed and announced separately. In Amritsar *Khas* the demand for practically every holding was fixed by myself.

70. Under the orders contained in appendix XX of the Settlement Manual where the enhancement in any village exceeds 33 per cent. by any considerable amount, the amount exceeding that percentage is to be deferred for 5 years. If it much exceeds 66 per cent., a further sum should be deferred for another 5 years. The total amount deferred in each tahsil under the operation of these rules is noted below :—

Tahsil.	Total.	For 5 years.		For 10 years.
		Rs.	Rs.	Rs.
Tarn Taran	13,575	12,575		1,000
Amritsar	14,400	11,200		3,200
Ajnala...	650	650		...
District	28,625	24,425		4,200

71. Remission of assessment was granted on new wells in accordance with the rules contained in paragraph 505 of the Settlement Manual. Wells being comparatively cheaply constructed in this district, exemption for the

Protective leases on wells.

ordinary period of 20 years was sufficient to repay the owners twice the cost of the well in all assessment circles. Printed certificates have been supplied to the owners of all wells granted protective leases, which numbered 144 in Tarn Taran, 633 in Amritsar and 488 in Ajnala, or 1,265 in all. The amount remitted in each case was the total *abiana* fixed for the well. The total sums remitted for the first year after re-assessment were:—

				Rs.
Tarn Taran	...	...	...	2,627
Amritsar	...	...	...	12,283
Ajnala	...	...	...	4,873
			District ..	19,783

Wells that become unfit for use are entitled to a remission of assessment under the general rules stated in paragraph 558 of the Land Administration Manual. The people are well acquainted with the rules, but I have come across cases where there has been inordinate delay in disposing of applications for remission. The matter is one that requires attention from the Revenue Assistant.

CHAPTER VI.—MISCELLANEOUS.

72. Settlement operations will be completed in all respects within the period of $3\frac{1}{2}$ years sanctioned, which Cost of the settlement and financial results. expires on 30th April 1914. The estimate provided for an expenditure of $3\frac{1}{2}$ lakhs. The actual expenditure till the end of February 1914 was Rs 3,17,029. That anticipated for the remaining two months is Rs. 12,140, but it is fair to deduct from the gross sum of Rs. 3,29,169 the value of certain tents, stationery and other stock available for transfer, and the proceeds of the sale by auction of other articles. Making due allowance for these items, I put the net cost of the settlement operations at approximately Rs. 3,25,000, or Rs. 25,000 less than that estimated. More exact figures cannot be given at present, but will be printed when available as an appendix to this report. Proposals are being submitted for the recovery of contributions aggregating about Rs. 17,000 from assignees of land revenue.

No settlement of recent years has been conducted at so small a cost. The district measures 1,558 square miles and contains 1,075 estates. The settlement of Delhi, where the area is 1,270 square miles and there are 773 estates, cost Rs. 4,50,000. In Ludhiana, with 1,270 square miles and 900 estates, the expenditure was Rs. 3,77,000.

The initial enhancement of the land revenue amounts to Rs. 2,99,104. Had the new demand been announced in all tahsils simultaneously, the cost of the settlement would have been recovered in a little over a year. As things are, the enhancement realised up to *kharif* 1913 inclusive exceeds by roughly Rs. 10,000 the total expenditure on settlement operations. I trust that this result will be considered satisfactory.

73. The investigation of the numerous revenue-free tenures of the district was taken up at an early stage of Assignments of revenue. the settlement and completed before

the announcement of the new demand in each tahsil. It was a tedious task, involving much labour, as though the enquiry made at last settlement had been careful and thorough, the English records in the Deputy Commissioner's office were found to be in a state of great confusion. The papers were in most cases tied up in bundles, with the contents often incorrectly endorsed on the outside. They have now all been overhauled, re-arranged in flat file boards, indexed and numbered. It was formerly the practice of the Supreme Government to convey sanction to a large number of grants, sometimes as many as 200, in a single letter, the grants being detailed in an accompanying register. In the files in the district office the number and date of the sanctioning letter, but not the serial number of the grant in the register, was

usually quoted as the authority for release. This caused great inconvenience when a reference had to be made to the original authority for any particular assignment. An index has now been compiled for each register, and the entry regarding any assignment can easily be traced.

The investigation just concluded has had valuable results. A considerable number of grants were found to be liable to resumption for persistent and flagrant breach of conditions. In at least two cases the grantees were men of notoriously bad character, and their assignment was resumed. One important *jagir* had been erroneously increased in value at last settlement, though the original authority was for a fixed annual sum. Had it not been for the vigilance of the clerk in charge of this work, the *jagirdar* would probably have received an even larger increment as the result of the recent re-assessment. When the investigation had been completed and suitable orders passed by competent authority, new registers in vernacular for each tahsil were drawn up. These contain all requisite details regarding grants other than those resumed, such as a brief history, a description of each assignee or share-holder and a note of the area and value of his share. The original authority and the conditions attached to the grant are also cited. Space has been left for entries regarding future changes. These registers have been divided into two volumes, one for grants in perpetuity or during the pleasure of Government, and the other for grants released only for a life or lives or for the term of settlement. The original registers have been deposited in the custody of the Deputy Commissioner, and copies have been supplied to each tahsil office. Full information on all matters connected with this subject is now available in a convenient form.

The total value of all assignments at various periods has been—

	Rs.
Prior to last settlement	1,92,255
By assessment of 1891-92	2,29,612
Prior to this settlement	1,99,407
By new assessment...	1,99,087

The value of assignments has thus slightly declined in spite of the increased assessment, owing to the resumption of grants for breach of conditions or on the expiration of the sanctioned term. The detail of grants renewed or continued is given below:—

Tahsil.	IN PERPETUITY OR DURING THE PLEASURE OF GOVERNMENT, INCLUDING GRANTS FOR THE UP-KRIP OF INSTITUTIONS.	FOR A LIFE OR LIVES.	FOR THE TERM OF SETTLE- MENT.		TOTAL.		10
			Number.	Value.	Number.	Value.	
Tarn Taran	...	199	Rs. 63,266	31	Rs. 3,297	6	Rs. 168
Amritsar	...	285	Rs. 65,346	36	Rs. 7,024	12	Rs. 489
Ajnala	...	200	Rs. 57,493	49	Rs. 1,333	2	Rs. 39
District	...	684	Rs. 1,86,105	116	Rs. 11,654	20	Rs. 696
						94	Rs. 632
						914	Rs. 1,99,087

Some explanation is required regarding grants for the term of settlement. At last settlement Mr. Grant found that there were some hundreds of petty village *mafis*, either for life or for the term of settlement, of less than three aeres in extent. All of these he made over to the owners of the village to do what they liked with for the term of his settlement. The land was included in the assessed area at the *bachh*, but the revenue was not collected and the loss fell not on the owners but on Government. In all cases this arrangement has now been terminated. A settlement has been made, usually with the land-owners, but occasionally with the *ex-mafidars*. Revenue has been assessed and is collected as *khalsa* in the ordinary way. But I have followed Mr. Grant's precedent in regard to all petty *mafis* of a smaller annual value than Rs. 20, which were released for the term of last settlement. Ninety-four such grants have now been treated in the manner authorized by paragraph 196 (3) of the Land Administration Manual, that is exactly as Mr. Grant treated petty *mafis* of less than 3 acres at last settlement. The total amount involved is Rs. 632, and during the term of the new settlement this sum will go into the pockets of the landowners or, if they choose, of the late *mafidars*, but when the term of settlement expires it will fall into the *khalsa* revenue. These grants are no longer strictly speaking *mafis* and have accordingly been omitted from the registers. The 20 assignments of an annual value of Rs. 696, shown in the statement as renewed for the new settlement, were all of a greater annual value than Rs. 20 and so did not fall within the scope of paragraph 196 of the Land Administration Manual, and were in favour of properly maintained institutions of special sanctity.

Grants intended for the upkeep of shrines were usually entered in the old registers in the name of an individual or of several share-holders. In most cases the entry in the new registers shows the grant in the name of the shrine, to be drawn by the manager for the time being. This change was made with the consent of the *mafidars* and *lambardars* concerned. Where a small grant of this class was enjoyed by a number of share-holders, they were generally induced to select one of their number as manager. It is to be hoped that this practice will lessen the number of disputes as to succession. No new assignment of any kind has been created at this settlement.

74. The following areas in Tarn Taran tahsil are under the management of the Forest Department:—Rakh Forests. Gagrewal (533 acres), Rakh Bahoru (589 acres) and Rakh Sarai Amanat Khan (1,441 acres). The two former are entire estates not assessed to revenue, but part of Rakh Sarai Amanat Khan has been given in proprietary right to deserving grantees and is under cultivation. Rakh Nag (456 aeres) in Amritsar tahsil is also under the Forest Department. Government owns two smaller *rakhs*, Dinewal in Taran Taran (71 acres) and Othian in Ajnala (50 acres), which are managed by the Deputy Commissioner.

75. Hitherto all but 18 villages in the district have paid half the total demand after the *kharif* harvest and half after the *rabi*. The last Settlement Officer recorded his opinion that in villages which had no canal irrigation it would have been a better arrangement if only one-third had been payable in the *kharif*, as the *rabi* crops occupy double the area of the *kharif* crops, but he did not succeed in converting the people to this point of view. During the present resettlement the people were again consulted. In Tarn Taran and Amritsar there was a practically unanimous desire to adhere to the old system, but 78 villages in Ajnala, mostly in the Sialkot circle, have been convinced of the wisdom of paying a smaller fraction of the demand with the *kharif* harvest. In that circle the autumn crops are extremely precarious and the incidence of the demand on the few acres harvested has often in the past been dispropor-

tionately high. The new arrangements are summarized in the following statement:—

Tahsil.	Assessment circle.	NUMBER OF VILLAGES PAYING				
		$\frac{1}{2}$ Kharif. $\frac{1}{2}$ Rabi.	$\frac{2}{5}$ Kharif. $\frac{3}{5}$ Rabi.	$\frac{1}{3}$ Kharif. $\frac{2}{3}$ Rabi.	All in rabi.	Total.
Ajuala	Sailab ...	16	...	50	7	73
	Hithar ...	63	...	18	...	79
	Uthar ...	116	...	1	...	117
	Nahri ...	69	—	4	...	73
Amritsar	Bet Bangar ...	86	...	...	...	86
	Jandiala ...	128	...	1	...	124
	Nahri (including Sub-urban).	137	...	1	...	138
	Mirankot ...	21	1	7	...	29
Tarn Taran	Upper Manjha ...	161	...	...	...	161
	Central Manjha ...	167	...	...	...	167
	Bet Bangar ...	28	...	...	...	28
Total District ...		987	1	80	7	1,075

Since 1865 the instalment for each harvest has been divided into two equal portions, that for the *kharif* being payable on the 15th December and 15th February and that for the *rabi* on the 15th June and 15th July. This system is a suitable one as regards the *kharif* harvest, as sugarcane and *toria*, both late harvested crops, are grown in nearly every village. Accordingly no change has been made in the dates for the *kharif* instalments. But there is no good ground for dividing the *rabi* payment into two portions, and it will in future be payable in a single instalment on the 1st July. The arrangements described in this paragraph were sanctioned by the Financial Commissioners in their Junior Secretary's letter No. 50, dated 5th January 1914.

76. The following cesses are levied:—

		Rs.	A.	P.
Local rate at ...	...	...	10	6 8 per cent.
Lambardari cess at ...	...	...	5	0 0 „
Total	...	15	6	8 „

The local rate was recently raised from Rs. 4-2-8 to Rs. 5-3-4 of the "annual value" of land by Punjab Government notification No. 211, dated 6th August 1913. The few *ala lambardars* still remaining are remunerated partly by *inams* and partly by a special cess of 1 per cent. on the revenue of their villages.

77. It is for Government to decide the term for which the new settlement should be sanctioned. In the neighbouring district of Gurdaspur and in most other tracts recently resettled a thirty years' term has been allowed,

Term of settlement.

The people are generally aware of this and might be inclined to resent a shorter period in Amritsar. What they do not realise is that the standard of assessment is much lighter in Amritsar than in Gurdaspur. Here we are taking approximately only one-half of the theoretical maximum : in Gurdaspur over two-thirds were taken. My own opinion is that Government should certainly reserve to itself the right to revise the assessment after twenty years. The Financial Commissioner (Mr. Diack) expressed his concurrence in this view in his reviews of the Tarn Taran and Amritsar assessment reports. In his orders on the Tarn Taran report the Lieutenant-Governor characterized the assessment as one of the most lenient ever proposed and noted that he was disposed to agree to a term of twenty years. If the reservation suggested is announced, it would not commit Government to a fresh settlement twenty years hence, but it might save the administration from sacrificing its just share in a large potential increment.

Village headmen.

78. The number of lambardars in each tahsil is shown below :—

Tahsil.	Number of estates.	NUMBER OF LAMBARDARS.	
		At last settlement.	Now.
Tarn Taran	356	940	938
Amritsar	377	1,088	1,038
Ajnala	342	811	800
District	1,075	2,839	2,826

The total ultimate assessment of the district will be Rs. 16 lakhs in round figures (paragraph 61) and the canal dues, which are also collected by lambardars, amount to Rs. $10\frac{1}{3}$ lakhs (paragraph 65). The average sum for which each headman is responsible is thus about Rs. 930, and the number of lambardars cannot be called excessive. Sixteen posts have been reduced since 1893, and three new posts have recently been created. Recommendations for the reduction of four posts in the Ajnala tahsil are still under the consideration of the higher authorities.

79. *Ala lambardars* were appointed in all villages at the 1865 settlement. They were remunerated by a cess of one per cent. on the land revenue

Chief headmen.

over and above the *pachotra* taken by the ordinary headmen, and in addition a plot of land was set aside in each village and known as the *ala lambardar's mafsi*. The revenue of these plots was fixed, but remitted in favour of the chief headmen. Subsequently under the orders contained in Punjab Government letter No. 31, dated 1st February 1890, these *mafis* were resumed and in lieu of them cash *inams* of equivalent value, but not exceeding one per cent. of the revenue of the village, were assigned to *ala lambardars*.

At last settlement a scheme was sanctioned under which the office of *ala lambardar* was to be abolished on the death of the existing incumbent in villages where there were only one or only two *lambardars*. Where there were more than two *lambardars* the office of one *ala lambardar* was not to be interfered with during the term of settlement. The value of the cash *inams* at that date was Rs. 9,078. Of this sum Rs. 5,127 were to be continued for the term of settlement and the balance of Rs. 3,951 was to be resumed on the death of existing incumbents. It was not, however, to be credited to Government, but to be utilized for the creation of *safed-poshi inams*. Sixteen years later Punjab Government letter No. 233 S., dated 1st June 1909, sanctioned the gradual abolition of the *ala lambardari* system in all districts where it

still obtained. On the extinction of each office on the death, dismissal or resignation of the existing incumbent the special cess of one per cent. was no longer to be collected and the cash *inam* was to be resumed. Up to the limit of Rs. 3,591 sanctioned in 1893 resumed *inam* were to be devoted to the creation of *safed-poshi inams*, but beyond that limit they were to be credited to Government. The effect of these orders up to the present time is shown by the following figures :—

Tahsil.	AT LAST SETTLEMENT.		NOW.	
	Number of ala lambardars.	Value of <i>inams</i> enjoyed.	Number of ala lambardars.	Value of <i>inams</i> enjoyed.
		Rs.		Rs.
Tarn Taran	351	2,662	188	1,569
Amritsar	395	4,160	221	2,756
Ajnala	388	2,256	160	1,318
District	1,134	9,078	569	5,643

80. As a result of the orders of 1st June 1909, referred to in the preceding paragraph, a fresh scheme for the regulation of *zamindari*, or in common parlance *safed-poshi inams* was drawn up by the Deputy Commissioner. At that time the number of *inamdar*s was 96 and the amount of lapsed *ala-lambardari inams* available for their payment was Rs. 2,437. The new rules, which were sanctioned by the Financial Commissioners in their letter No. 1796, dated 22nd February 1911, provided for the gradual reduction of the number of *inamdar*s to 86, or two in each *zail*, graded as follows :—

	Rs.
51 at Rs. 50	... 2,550
35 at Rs. 40	... 1,400
Total	... 3,950

The process of reduction has hitherto been a slow one and there are at present 92 *inamdar*s, 32 in Tarn Taran, 36 in Amritsar and 24 in Ajnala. The value of lapsed *inams* is now Rs. 3,601 or an average of only Rs. 39 each. The inadequacy of their remuneration is a constant ground of complaint. The Deputy Commissioner, the Superintendent of Police and myself agreed in thinking that 86 is an excessive number of *inamdar*s, and that better results could be expected from a smaller number of men enjoying larger *inams*. I have accordingly recommended that the number should ultimately be 59, graded as follows :—

	Rs.
50 on Rs. 70	... 3,500
9 on Rs. 50	... 450
Total	... 3,950

The reduction is to be carried out gradually as the existing incumbents vacate office. Dismissals will be governed by the Land Revenue rules, no *inamdar* being dismissed merely because of the introduction of the new scheme. The grading provides for one *inamdar* each for 27 *zails*, and two each for the remaining 16 where the work of the *zaildar* is specially heavy. No *inam* is to be raised above Rs. 50 per annum, until all *inams* of a smaller value have reached that amount. This scheme has been sanctioned by the Financial Commissioners in their Junior Secretary's letter No. 1852, dated 14th March 1914.

81. The *zaildari* system was introduced in the district in 1865 and was carefully reorganized at last settlement. The number of *zaildars* was fixed at

zaildars. 43, 16 in Tarn Taran, 15 in Amritsar and 12 in Ajnala. No change has been proposed in the number or boundaries of *zails*. Hitherto each *zaildar* has been paid by a draw-back of one per cent. on the total land revenue of his *zail*, except the *zaildar* of Amritsar *Khas* who receives only 12 annas per cent. This system causes great inequality in the scale of payment, the amount of remuneration varying from nearly Rs. 600 to less than Rs. 200 per annum. The revenue demand of a *zail* is a very misleading measure of the work a *zaildar* has to do, which depends primarily on the state of crime in the tract. Some of the worst paid *zails* are the hardest worked, and both the Deputy Commissioner and I agreed with the majority of *zaildars* in thinking that a change of system was required. A re-arrangement of boundaries so as to produce approximate equality of payment would have involved enormous trouble and the abandonment of an arrangement that had hitherto worked successfully. On the other hand, a system of graded allowances would have been generally unpopular. The subject was discussed with representative *zaildars*, and finally practically the whole body expressed a preference for equal payments for all. I have accordingly submitted for sanction a scheme under which each *zaildar* is to be paid Rs. 350 per annum. Eight men who were receiving more than this under the old assessment are to be given allowances, to cease on their vacating office, sufficient to keep their total emoluments at the same figure as before. A deduction of one per cent. from the total new assessment will provide for those payments and will leave a small balance available, which will gradually be increased as the deferred enhancements fall in five and ten years hence and as the personal allowances cease on the death or resignation of the eight existing recipients. The balance will be distributed at the discretion of the Deputy Commissioner among those *zaildars* whose work is particularly arduous or who are for other reasons specially deserving. But no newly appointed *zaildar* is to receive more than Rs. 350 per annum till at least a year has elapsed since the date of his first appointment.*

82. There are at present 305 *patwaris* in the district—105 in Tarn Taran, 110 in Amritsar and 90 in Ajnala. The addition of one in Tarn

Patwari and *kanungos*. Tar and two in Ajnala has been sanctioned, bringing the total number up to 308. A reduction in the number of assistant *patwaris* from 20 to 19 has also been sanctioned. These changes will take effect from the 1st April 1914.

The *kanungo* staff consists of the district *kanungo*, his assistant and an inspection *muharrir* at head-quarters, an office *kanungo* at each taluk and 11 field *kanungos*. A proposal for increasing the number of field *kanungos* to 15, or 5 for each taluk, has just received the sanction of Government.

83. An account of occupancy and *panahi* or protected tenants is given in paragraphs 140 to 144 of the final report of last settlement. No further

enquiry into their status was necessary and none was attempted in this settlement. Mr. Grant's description is still accurate. Suits for the enhancement or reduction of rent have not been numerous. Only three suits for reduction were instituted and all were unsuccessful. Of 135 suits for enhancement 42 were dismissed and in the rest an enhancement was allowed.

The Commissioner of the Lahore Division in a recent circular discussed the desirability of fixing a uniform scale of enhancement for the guidance of courts in determining a "fair and equitable" rent under section 25 of the

*Since this paragraph was written the orders of the Financial Commissioner have been received. The scheme proposed has been sanctioned with one modification, viz., that the number of *zaildars* to receive more than Rs. 350 is to be fixed at the outset. It has accordingly been decided that the grading shall be as follows:—

	Rs.
9 on Rs. 450	4,050
84 on Rs. 350	11,900
Total ... 43	15,950

The number of appointments in the first grade will be attained gradually as the amount available for the remuneration of *zaildars* increases.

Tenancy Act. At present there appears to be a great diversity of practice in this matter. I have suggested that the scale given in paragraph 195 of Mr. (now Sir Michael) O'Dwyer's final report of the Gujranwala settlement would be suitable for this district. For the convenience of Revenue Courts in dealing with suits for enhancement, this scale is reproduced below:—

- I.—In the case of occupancy tenants under section 5 (1) (a) the legal limit of 2 annas per rupee might be decreed at once.
- II.—In the case of occupancy tenants under section 5 (1) (b), (c), (d) for whom the legal limit is 6 annas per rupee—
 - (a) if the old *malikana* is less than 2 annas per rupee, raise to 2—4 annas per rupee;
 - (b) if the old *malikana* is 2 annas per rupee or more, raise to 4—6 annas per rupee—
- III.—In the case of occupancy tenants under sections 6 and 8, for whom the legal limit is 12 annas per rupee, —
 - (a) if the old *malikana* is less than 2 annas per rupee, raise to 4—6 annas per rupee;
 - (b) if the old *malikana* is from 2—4 annas per rupee, raise to 6—8 annas per rupee;
 - (c) if the old *malikana* is more than 4 annas, raise to 8—12 annas per rupee.
- IV.—But in all cases regard should be had, among other considerations, to the former and present assessment of the holding at least till five years after re-assessment. If the revenue demand has been largely increased, thereby involving a large addition to the *amount* of the *malikana*, this would be a reason against a considerable increase in the *rate*; whereas if the revenue demand has been considerably reduced by re-assessment, that would be a reason for increasing the *rate* of *malikana*, as otherwise the landlord would lose part of the *amount*.

I would, however, prefer to make rule IV more definite. Where the demand of a holding has been increased by 50 per cent. or more, e.g., in many villages in Tarn Taran and the Amritsar Suburban circle, I would allow no enhancement at in the rate of *malikana* till at least 5 years after re-assessment.

84. New rules for the measurement and assessment of areas subject to river action have been sanctioned by the Financial Commissioner and are printed as appendix IV to this report.

The main difference from the rules hitherto in force is that provision has now been made for the remission of assessment on land below the high bank of the Beas abandoned as uncultivable owing to the spread of *kallar*. Further, the new rules direct that the fluctuating assessments in the Beas riverain shall ordinarily be revised only once in every four years. Annual revision will seldom be necessary as the changes caused by the river are comparatively slight. In certain minor particulars the old rules have been simplified and made more definite.

85. A note dealing with secure and insecure areas and the principles to be followed in granting suspensions and remissions of revenue was recently submitted. It has been modified in certain respects by the Financial Commissioner and is printed as sanctioned in appendix VI to this report.

86. No fresh enquiry into tribal customs was made at last settlement, though Mr. Grant prepared a brief abstract in English of the *riwaj-i-am* compiled in vernacular in 1865. The latter contained only 18 questions, and did not deal at all with customs concerning betrothal, marriage, divorce, guardianship and minority. Representatives of an excessive number of tribes, some of them of little numerical importance, were consulted and their answers

were generally recorded with an unnecessary amount of detail. A new *riwaj-i-am* has now been drawn up, dealing with all important points of custom. It contains 133 questions and the leading men of 19 tribes or sub-divisions have been consulted. Relevant cases decided by the Chief Court or subordinate courts have been cited, as well as mutations dealing with questions of custom, and the new *riwaj-i-am* should be a valuable aid to civil and revenue courts. The whole work was entrusted to the Extra Assistant Settlement Officer.

A condensed abstract in English has also been prepared, as Mr. Grant's pamphlet was in many respects deficient and was seldom referred to in the courts. The new abstract is now in the press and will be published as one of the uniform volumes of district customary law. I am indebted to Mr. R. H. Crump, Assistant Commissioner, for assistance in the compilation of this work, which is arranged on the model of Major Beadon's recently published volume for the Delhi district.

87. A new edition of the statistical volume of the district Gazetteer, containing the figures for the 1911 Revision of the District Gazetteer. census, was published in 1912. Lakhmi Das, Head Clerk of the Settlement Office, was responsible for the compilation of the tables and the correction of proofs.

The narrative volume is also being revised, and brought up to date. The various subjects are being dealt with strictly in accordance with the order prescribed by Standing Order No. 43. Mr. Crump is in charge of the work under my supervision and will see the new volume through the Press. Part is already in print, and the work of revision will be completed in a few weeks.

Training of officials.

88. The following officers received training in the settlement :—

Assistant Commissioners	...	...	...	3
Extra Assistant Commissioners (Probationary)	...	...	...	5
Tahsildar candidate	...	...	...	1
Munsif candidates	...	...	...	3
Naib Tahsildar candidates	...	...	...	7
Kanungo candidates	...	...	...	10
Others	...	...	...	8
			Total	37

The expenditure on their salaries and travelling allowances, other than those of gazetted officers, totalled Rs. 4,831 and was debited to the cost of the settlement.

89. I note below some of the principal matters connected with the revenue administration of the district to which the attention of the Deputy Commissioner might usefully be directed :—

- (i) The only really weak revenue-paying tract is the Sailab and Hithar circles of Ajnala, which will always require careful handling (see appendix VI).
- (ii) A year of excessive monsoon rainfall will probably be followed by extensive floods in the western part of Amritsar and Tarn Taran and the Ajnala Nahri and Uthar circles. Remissions of the demand for crops destroyed may be required in this event.
- (iii) The rise of the sub-soil water-table in the tract subject to water-logging should be watched (paragraph 7 of the Amritsar assessment report). The principal drainage lines and especially those described in paragraphs 3 to 6 of the Amritsar report require periodic clearance. Most but not all of these are under the charge of the Irrigation Department and are carefully

looked after. But the Deputy Commissioner should realize that the welfare of a large tract depends upon their being kept in an efficient state. Certain channels are constantly being obstructed by the *zamindars* themselves and this practice should be severely dealt with.

- (iv) The new di-alluvion rules (appendix IV) will be introduced this spring under the supervision of the Extra Assistant Settlement Officer, who can be trusted to see that the *patwaris* understand them. But their working for the next two or three years will require further supervision.
- (v) Care should be taken that the rules for the imposition and remission of *nahri parta* (appendix III) are properly observed. It is unlikely that there will be many changes in irrigation, but the *patwaris* are inclined to overlook such changes as do occur. A specially careful *girdawari* will be necessary in *kharif* 1915 in the 50 villages in the Ajnala Nahri and Uthar, where the amount of *nahri parta* announced is subject to revision (paragraph 64 of this report). A table should be prepared showing for all these villages the area irrigated in each of the four harvests ending with *kharif* 1915. From this the Deputy Commissioner will be able to decide for each village whether the area now assessed to *nahri parta* is too high or too low.
- (vi) Map correction under the new rules (Standing Order 16, part F) and the preparation of quadrennial *jamabandis* (Standing Order No. 23) will require close supervision. Tahsildars should be held responsible for keeping up to date the tracing cloth maps in the tahsil offices (paragraph 26 above). Mutation work is bound to fall into arrears unless special assistance is given from time to time (paragraph 34).
- (vii) The new abstract village note-books and *mafī* registers must be kept up to date (paragraphs 31 and 73). The *sadr kanungo* is responsible for the abstract note-books, and the *mafī muharrir* for the registers.
- (viii) The assessment of the village of Chaia in the Ajnala Uthar circle is subject to reconsideration every four years (paragraph 49 of the Ajnala assessment report and paragraph 20 of the Financial Commissioner's review).

90. I have already referred to the valuable services of the Extra Assistant Settlement Officer in connection with riverain measurements and the record-of-rights.

Notice of officers. It is difficult to acknowledge in proper terms the help I have received from Khan Sahib Shaikh Fazl Karim, whose absolute probity, impartiality and unsparing devotion to duty made him an ideal assistant. All departments of his work have been characterized by thoroughness and an exceptional mastery of detail, and I attribute any success which has attended the settlement, and especially its completion within the allotted time, to these qualities and to his capacity for getting work out of his subordinates. This praise is in no way exaggerated. No conventional words of commendation would have done justice to Shaikh Fazl Karim's services, which I trust may receive some recognition from Government. In addition to his other duties, he has carried out the assessment of two circles, and is thus in all respects qualified for the independent charge of a settlement. I am confident that if selected for such an appointment, he would give satisfaction to Government.

The three Tahsildars were Kazi Mazhar Hussain in Tarn Taran, Pandit Nand Lal in Amritsar and Munshi Sawan Singh in Ajnala. All were excellent workers, as is proved by the note of the Director of Land Records quoted in paragraph 30 of this report, and it would be invidious to distinguish between them. But a special word of praise is due to Sawan Singh, a *Jat* official

who by his capacity, honesty and hard work has risen from the position of *patwari* to his present rank. His work has been distinguished by great energy and thoroughness, and he enjoys a high degree of popularity and respect among his subordinates and the *zamindars*. Both he and Kazi Mazhar Hussain have been retained as *mahal* Tahsildars in their respective charges. The latter has a long record of honourable service in various settlements, and is now approaching retirement. Pandit Nand Lal, an officer of great ability, has been promoted to the rank of Extra Assistant Commissioner and is now Revenue Assistant in Ferozepore. He was in charge of the largest and most difficult tahsil and deserves commendation for the tact and discretion with which he handled various complicated questions connected with the valuable lands round Amritsar City.

The settlement was also fortunate in its Naib-tahsildars, many of whom belonged to the agricultural classes. The fact that there was singularly little friction with the *zamindars* and very few complaints against officials is the best possible tribute to their honesty and high standard of duty. Ch. Muhammad Ismail, B.A., has been quite exceptionally useful as my reader throughout the settlement. He has an extraordinarily minute knowledge of all branches of revenue and settlement work and has been responsible for the compilation of all assessment statistics. He also rendered valuable help in the disposal of old and complicated partition cases. The Settlement Officer's reader is much exposed to jealous innuendo, but from first to last there has not been an imputation against Muhammad Ismail's probity. L. Lakhmi Das has been an honest, accurate and efficient Head Clerk of the English Office. He succeeded L. Gokal Chand, who was promoted to an appointment in the office of the Chief Commissioner of Delhi. Of Naib-tahsildars employed in the field, I would single out for special praise in Tarn Taran M. Ganga Ram, S. Muhammad Yasin, and Ch. Hussain Ali, B.A. In Amritsar tahsil M. Dhian Singh was a conspicuous success in charge of the difficult *Sadr* circle. He is the only Naib-tahsildar who has worked from the commencement to the end of settlement. Excellent work was also done by S. Muhammad Raza and by Rahmat Ali, the district *kanungo*, who was in charge of a Naib-tahsildar's circle for nearly two years. In Ajnala S. Massu Khan, Ch. Muhammad Khan and B. Jagat Singh deserve high praise.

Considerations of space prevent the enumeration of all the *kanungos* who worked well. Mention must, however, be made of Fazl Kadir Khan, who on several occasions acted as Naib-tahsildar, of Alam Ali, who was in charge of *mafî* work throughout the settlement, of Chajju Singh, the assistant district *kanungo*, and of Harbhagwan, the *nazir*. Hassan Din also did well both in the field and as reader to the Extra Assistant Settlement Officer, while Shambu Nath and Ishar Das were very useful in the office. The rest must remain content with the commendation recorded in their character rolls and with such promotion as I have been able to secure for them. Few settlement *kanungos* can hope ever to attain to higher rank and with the approaching reduction in the number of settlements, their prospects are extremely dismal. It is to their credit that as a class they carry out their monotonous duties so satisfactorily.

The services of the numerous *patwaris* and clerks who have done good work must remain in obscurity. To them and to those non-officials, *zaildars*, *safed-poses*, *lambardars* and others, whose co-operation has contributed to the successful completion of the settlement, I can only record my acknowledgments. A list of those specially deserving has been placed on record, and I trust that they will receive recognition at the divisional "settlement darbar" which I understand is to be held next winter.

91. Orders are required only as regards the term of settlement (paragraph 77).
Orders required.

H. D. CRAIK,
Settlement Officer, Amritsar.

The 15th March 1914.



नन्दमुख भगवन्



APPENDICES.

APPENDIX I.

Statement showing by tahsils the population, area, and revenue of the Amritsar district.

1	2	3	4	5	CULTIVATED AREA (IN ACRES).					REVENUE (IN RUPHES).									
					6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
TOTAL AVERAGE OF CROPS (IN ACRES).																			
Tahsils.					Total area (in acres).	Irrigat. d.	Unirrigated.												
Ajnala	183,454	266,386	49,751	63,130	64,111	39,511	759	104,381	20,232	28,892	49,124	153,505	198,885	174,191	24,644	3,10,191	3,50,394	13	2 4 6 2 0 2
Amritsar	272,548	349,296	40,822	28,312	101,120	66,989	839	168,946	425	110,759	111,214	280,162	343,638	314,894	28,744	5,47,409	7,97,771	29	2 8 5 2 4 0
Amritsar City	152,756																		
Tarn Taran	271,970	382,283	39,412	26,215	52,214	143,783	87	201,684	5,886	109,686	115,572	316,656	390,915	354,877	36,038	4,12,652	5,39,816	31	1 11 3 1 8 4
Total District	880,728	997,985	129,985	117,057	217,445	255,283	1,685	474,413	26,543	249,367	275,910	750,323	933,388	843,962	89,426	12,70,252	15,97,981	26	2 2 1 1 14 4

APPENDIX II.

Statement showing the population, area, aviations, and revenue of Amritsar tahsil by assessment circles as rearranged.

Name of circle.		Area in acres.										Sales since Settlement									
		Irrigated.					Unirrigated.					To zamindars.					To others.				
		Population.					Total cultivated.					Cultivated area.					Land Revenue.				
		Number of villages.	Not available for cultivation.	Available for cultivation.	Chabi.	Nahi.	Total.	Satid.	Barad.	Total.	Land revenue.	Price or money.	Acres.	Rs.	Acres.	Rs.	Price or money.	Other consideration.			
Ret Bungar	...	86	57,952	77,993	10,908	880	13,416	21,737	46	35,299	425	30,571	30,996	66,205	751	2,274	3,376	4,20,494	501	710	84,927
Jandiala	...	124	76,732	99,849	6,870	5,237	84,528	4,388	70	38,956	...	48,756	48,756	87,742	1,375	3,509	5,940	5,91,597	659	1,088	1,22,473
Nahri	...	132	112,056	124,914	14,896	14,637	49,999	32,804	285	74,058	...	21,293	21,293	95,381	1,958	2,625	5,262	5,75,420	1,671	4,662	2,54,524
Suburban	...	6	160,201	15,681	4,165	1,526	2,678	5,203	259	8,140	...	1,850	1,850	9,990	315	772	2,567	4,35,918	1,026	3,335	11,76,419
Mirankot	...	29	18,363	30,859	3,983	6,032	9,499	2,847	175	12,525	...	8,319	8,319	20,844	408	771	1,355	1,08,081	412	1,099	74,744
Total	...	377	425,304	349,296	40,822	28,312	101,120	66,989	839	168,648	425	110,769	111,214	280,162	4,807	9,951	18,700	21,62,510	4,269	10,894	17,13,087

Statement showing the population, area, alienations and revenue of Amritsar tahsil by assessment circles as re-arranged—concluded.

1	MORTGAGES WITH POSSESSION		LAND REVENUE.														
	To <i>sacimbers</i> .	To <i>others</i> .	Khalsa.			Assisted.			Total.			Under protective leases.			Total.		
Name of circle.	Cultivated acres.	Cultivated acres.	Price or money.	Price or money.	Cultivated acres.	Price or money.	Cultivated acres.	Price or money.	Total.	Initial.	Total.	Initial.	Total.	Initial.	Total.	Total.	
Bet Bangar	7,141	27,6922	1,873	1,66,584	1,27,749	300	1,789	1,29,838	9,731	...	31	9,762	1,37,480	300	1,820	1,39,600	
Jandiala	...	9,836	12,78,447	2,836	2,81,424	1,75,456	1,575	4,804	1,81,835	11,768	...	197	11,965	1,87,224	1,575	5,001	1,93,800
Nahri	...	11,403	21,10,457	4,557	6,41,864	2,18,420	2,405	3,680	2,24,505	38,203	170	597	38,970	2,58,623	2,575	4,277	2,63,475
Suburban	...	548	1,35,490	618	2,32,505	44,480	9,519	262	54,261	9,421	131	8	9,560	63,901	9,650	270	63,821
Miran kot	...	2,482	2,94,315	1,719	1,58,776	26,882	300	620	27,502	18,978	...	295	19,273	45,560	300	915	47,075
Total Faisil	...	31,410	47,95,631	11,503	14,81,153	5,92,987	14,091	11,155	6,18,241	38,101	301	1,128	89,530	6,81,088	14,400	12,283	7,07,771

APPENDIX III.

RULES FOR THE IMPOSITION AND REMISSION OF NAHRI PARTA.

1. No field which was assessed as *chahi* at settlement and which continues to pay a *chahi* assessment shall be liable to the imposition of *nahri parta*. But, subject to the limitations mentioned in rule 7 below, *nahri parta* shall be remitted on any fields which have changed from *nahri* into *chahi* owing to canal irrigation having been superseded by newly constructed wells.

2. In making the changes of soil classification prescribed by the rule regarding column 7 of the *jamabandi* form (paragraph 24 of Standing Order No. 23), no field or part of a field—

- (a) shall be converted from non-*nahri** to *nahri* unless the *khasra girdawari* shows it to have been irrigated in two out of the four years ending with that to which the *jamabandi* relates;
- (b) shall be converted from *nahri* to non-*nahri* unless it has not been irrigated in the year to which the *jamabandi* relates, and likewise in the two preceding years.

3. If only a part of a field has been converted from non-*nahri* to *nahri* or vice versa no change of classification shall take place if the area affected is less than 2 *kanals*.

4. All changes of classification shall be made by the *patwari* in red ink. The field *kanungo* shall see that the changes made are in accordance with rule 2, and shall sign the new entry. He shall further by an examination of the *khasra girdawari* satisfy himself that a change of entry has been made by the *patwari* wherever such a change was required. He shall carefully check the totals of *nahri* and *barani* entered at the end of the *jamabandi*, and shall attest them with his signature. In his note on changes in soil entries attached to the *jamabandi* (see instructions appended to the *jamabandi* form in paragraph 24 of Standing Order No. 23) he shall state exactly what he has done to ensure correct entries. In attesting *jamabandis* Tahsildars and Naib Tahsildars must pay special attention to these new soil entries.

5. When the total *nahri* area differs from that shewn in the last *jamabandi*, the field *kanungo* shall apply to the excess area or the reduction of area, as the case may be, the rate of *nahri parta* fixed and announced by the Settlement Officer for the estate. But in making this calculation he shall omit all fields which were assessed as *chahi* at settlement and which are still paying a *chahi* assessment. The village rate can be ascertained by reference to the Settlement Officer's order fixing the demand for the estate in the standing record-of-rights. In villages which received no canal irrigation at settlement the following rates shall be applied:—

Tahsil.	Assessment circle.			Rate per acre of <i>nahri parta</i> .
	Upper Manjha	Central Manjha	Bet Bangar	
Tarn Taran	Rs. A. P. 0 14 0
"	0 8 0
"	0 11 0
Amritsar	0 8 0
"	1 0 0
"	1 2 0
Ajnala	1 0 0
"	0 10 0
"	1 3 0
"	1 1 0

NOTE.—In the Amritsar Suburban circle all estates except one (Bharariwal) are already paying *nahri parta*. In the Ajnala Hithar circle there is no irrigation from the Bari Doab Canal, nor is there ever likely to be. It is thus unnecessary to fix rates for these two circles.

6. If an additional *nahri* assessment under these rules has already been imposed on or a reduction made in a village at a previous quadrennial attestation, the area to which the rate referred to in the preceding paragraph will be applied, will be the excess or reduction of area since the last imposition or reduction of *nahri* assessment. If no previous assessment has been imposed or reduced, the area will be the excess or reduction of area since last settlement.

7. If the sum resulting from the application of the rates detailed in rule 4 to the area defined in rule 5 is less than Rs. 50 or than half of the total amount of *nahri parta* already payable in that village (whichever is less), no further action will be taken, but the field *kanungo* will note the result of the calculation in his attestation note on the *jamabandi*, and the Tahsildar or Naib Tahsildar who attests the *jamabandi* should check the calculation and should state in his attestation note that he has done so.

* "Non-*nahri*" means any kind of land other than *nahri*. It includes *chahi*, *sailab*, *barani*, *banjar kulin* or *jadid* and *ghair munkin*.

8. If the above sum amounts to Rs. 50 or more or to more than one-half of the total amount of *nahri parta* already payable in the village, the *patwari* will prepare a list in the following form and forward it to the field *kanungo*. After it has been checked and signed by the latter and by the Revenue Officer of the circle, it will be forwarded to the *Tahsildar* unless he is himself the Revenue Officer of the circle. List of fields converted from *barani* to *nahri* and *vice versa* with additional *nahri* assessment:—

Patwari circle tahsil for the year 19

NOTES.—*Columns 7 and 9.*—If part of a field is affected, the word “*min*” should be added. If a whole holding is affected, no detail of field numbers is required; the words “*salim khata*” are sufficient.

Columns 8 and 9.—In total of the village acres should also be noted in red ink.

Column 11.—For rate see rule 5. It will be uniform for the village concerned.

Column 12, 13, 15 and 17.—Details of map, if any, should be noted in red ink.

Columns 12, 13, 15 and 17.—Details of maps, if any, should be noted in red ink.

9. On receipt of the detailed statement the Tahsildar shall have an abstract for the tahsil prepared in duplicate by the *wasi**l**-baki-nawis* in the form below. A separate abstract will be prepared for each Canal Division concerned. After signature a copy of the abstract with the detailed statements will be forwarded by the Tahsildar to the Collector so as to reach his office not later than July 31st :—

*Abstract showing nahri assessment payable on account of extensions of canal irrigation or
remissible on account of reductions of the same in tahsil district
for the year 19* .

1	2	3	4	5	6	7	8	9	10	11	12	13
Serial No.	Topographical No.	Name of village.	Area in acres converted from non-nadri to nadri.	Rate.	Land revenue.	Area in acres converted from nadri to non-nadri.	Land revenue at rate given in column 5.	Land reve- nue.	Khasia.	Maf.	Cesses.	Total.

10. After the statements have been checked in his office the Collector shall report the amount of the assessment to be imposed and to be reduced through the Commissioner for the sanction of the Financial Commissioners and shall inform the Executive Engineer of the proposal made, sending him at the same time the abstract for information and return. On receipt of sanction he will return the detailed statements to the Tahsildar, ordering him to have the addition to, or the reduction from, the assessment incorporated in the *kharif bachh*.

11. In incorporating the changes due to addition or reduction of assessment in the *bachh* the *patwari* shall, whether the assessment on *nihri* and *barani* is distributed at an all-round rate or by differential soil rates, impose or reduce the *nahri* rate on or from the holdings affected taking the details from the statement in rule 7.

12. Field *kanungos* and Revenue Officers must carefully check the *patwari's* *bachh* work and see that the above orders are correctly carried out.



APPENDIX IV.

Rules relating to the imposition, remission and reduction of assessment on lands subject to the action of the Beas and Ravi rivers and their branches.

PART A.

I.—IMPOSITION OF ASSESSMENT.

1. The following rates should be applied in assessing :—

(a) Land subject to river action and not cultivated at settlement, but subsequently brought under cultivation.

(b) Land under the high bank of the Beas of which the assessment has been remitted under rule 10 owing to saline efflorescence but which has been subsequently brought under cultivation.

(c) Land originally assessed as cultivated, but of which the assessment was subsequently remitted under these rules and which has again been brought under cultivation—

Rate.	Distinguishing crops.	ON THE BEAS AND ITS BRANCHES.		ON THE RAVI AND ITS BRANCHES.	
		Per acre.	Per kanal.	Per acre.	Per kanal.
Lowest or <i>adna</i> ...	<i>Masar, chural, ajwain, methi and senji</i> ...	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
		0 7 3	0 0 9	0 7 3	0 0 9
Middle or <i>darmiana</i> ...	<i>Jowar and chari, moth, mung and mash, kharsu or dhan, til, barley, gram, rape, taramira, linseed, melons.</i>	0 14 6	0 1 6	0 14 6	0 1 6
Highest or <i>kamil</i> ...	All crops not named above, such as wheat, maize, sugarcane, cotton, superior rice, also lands having two crops in one year.	1 4 0	0 2 3	1 8 0	0 2 6

2. Ordinarily the assessment will be made by the crop, but when the results are poor the assessing officer may, for special reasons to be noted on the file, assess any class of crop at the next lowest rate, or even, in the case of the lowest class, altogether remit the assessment if the results are below a four-anna yield on the whole field.

3. When on any land the highest rate is not imposed in the first year of measurement under the preceding rule then in the next year of measurement the rate to be imposed shall be that proper to the highest class of crops grown on the land in the interval, unless for special reasons the assessing officer considers that the previous assessment should remain unaltered, or that if unassessed it should remain unassessed. And at subsequent measurements the same rule shall apply. But when the highest rate has once been imposed, the assessment shall not be altered except under the operation of rule 11.

4. When it is doubtful which of two rates should be applied, the lower should be taken.

5. When the culturable area fit for grazing is considerable and exceeds 5,000 kanals the Collector may, on the report of the assessing officer, impose a rate of one anna per ghumao. In such cases whole squares should, as far as possible, be included in the area to be assessed, to avoid unnecessary increase in field numbers.

6. The classification of land should not be too minute; unless a survey number is very large, it will usually be best to apply a single rate to the whole number, even though different parts of the field may differ somewhat in the character of the crops grown and in the quality of the soil.

7. In calculating the revenue no fractions of less than 10 marlas should be taken into account; less than this will be disregarded, and more than this will be taken as a whole kanal.

II.—REMISSIONS AND REDUCTION OF ASSESSMENT.

8. When by river action land assessed as cultivated is carried away or rendered unfit for cultivation or land assessed as pasture is carried away or rendered unfit for grazing, the assessment thereon shall be remitted.

9. Land which has been rendered culturable by river action and subjected to assessment at settlement or under these rules, and subsequently remains uncultivated for four successive harvests, may be presumed to have been rendered unfit for cultivation by river action.

10. When land under the high bank of the Beas, which was assessed as cultivated at settlement or subsequently under these rules, remains uncultivated for four successive harvests owing to the spread of *kallar*, the assessment thereon shall be remitted.

11. When the quality of land which has been subjected to assessment at settlement or to the highest rate prescribed in rule 1 of these rules is found to have deteriorated owing to the action of the river or a deposit of sand, the assessment thereon may be reduced to the next lower rate prescribed in rule 1, provided that the settlement revenue or the full rate once imposed shall not be reduced merely because the land is found to be sown with inferior crops. The higher rate will be imposed or re-imposed, as the case may be, when the land is again found to have improved.

12. Save as provided in rules 9 and 10, nothing in these rules shall be taken to authorise the remission or reduction of land revenue on land which is not at the time subject to river action.

PART B.

PROCEDURE.

The Collector shall maintain in his office a list of estates subject to the action of the Beas and Ravi rivers and their branches, and any alterations from time to time necessitated in this list shall be made under his orders.

2. In estates subject to the action of the Ravi the measurements will be made annually as soon as the river has fallen to its ordinary cold weather level, which will usually be by the 1st of December. In estates subject to the action of the Beas the measurements will usually be made in the year of quadrennial attestation; but when in any estate changes of sufficient importance have occurred in the estate as a whole or in individual holdings the measurements may be ordered by the Collector in any other year. At the end of the *kharif girdawari* the Tahsildar will submit to the Collector a list of estates not coming under quadrennial attestation in which such measurements appear to be necessary; and the Collector will return the list with his orders thereon.

NOTE.—No change will be considered of sufficient importance where the alluvion or dialuvion does not affect an amount of revenue equivalent to 10 per cent. or more of the demand of the estate (or individual holdings) concerned.

3. The changes caused by river action should be shown both in the patwaris' own dialuvion tracing and in the tracing to be filed with the Government copy of the dialuvion file. The former tracing should be prepared from the village map on unbacked mapping sheets and cover the whole of the village or the part liable to be affected by dialuvion changes, and should continue to be used till a fresh tracing is prepared under rule 5. The tracing to be filed with the Government copy of the dialuvion file will be on unbacked mapping sheets of suitable size and will be prepared each year.

4. The patwaris' copy of the dialuvion tracing shall show the edge of the river as well as any new fields formed as the result of dialuvion changes. The line representing the edge should be blue, and at both ends of it the year in which the measurements were made should be noted. The position of the edge will be fixed by measuring the remaining sides of the fields which are partly under the river and the position of the new fields with reference to the old fields out of which they have been formed; but if this method be not practicable, then the squares covering the affected part of the village will be reproduced from the base lines fixed by the Survey of India Department in those estates which were partly or entirely re-measured on the frame work laid down by that department, and off-sets taken from them. When the assessment has been made the fields assessed at the "adna" rate will be marked off by lines of green dots around them. The dots will be run together into a continuous green line when the "kamil" rate has been imposed. The tracing to be attached to the Government copy of the dialuvion file will reproduce only the changes of the particular year for which it has been prepared, but in order that there may remain no doubt as to the position of any new fields, the fields that touch them should also be shown.

5. The procedure for the correction of field maps will be applied without any modification to the portions of dialuvion villages beyond the reach of river action, but as regards areas subject to such action, the procedure will be modified as follows:—

- (a) *Tatimma shajras* will be prepared only for changes other than those due to dialuvion. Changes due to dialuvion will be shown from year to year in the dialuvion tracings prescribed in rule 3.
- (b) At the end of every fourth year when a special attestation is carried out a fresh tracing of the portion of the village subject to river action will be prepared, and all new fields, whether formed in consequence of dialuvion or other changes and whether shown in the old dialuvion tracing or separate *tatimma shajras*, will be incorporated therein. This tracing will be prepared in duplicate, and one copy of it will be filed in the tahsil with the *jamabandi* and the other retained by the patwari for use during the next four years. Both copies will be duly attested by the kanungo. The preparation of a fresh tracing may be ordered even before the quadrennial attestation if the old tracing cannot continue to be used without producing confusion.

(c) In the dialuvion files new fields will be given temporary numbers, such as $\frac{40}{1}$, $\frac{40}{2}$, $\frac{40}{3}$, &c., but all fields incorporated in the fresh tracing prepared under (b) will at the time of incorporation be renumbered in accordance with the system laid down in paragraph 41 and duly entered in the field book prescribed in paragraph 42 of Standing Order No. 16. Fields shown in *tatimma shayras* will have been already numbered in accordance with the system.

6. It is not necessary that every new field should be given a new number. If a portion of a field is submerged and the ownership of that portion remains unaltered a new sub-number should not be given thereto as the soil entry will show all that is necessary. Again if any portions of an uncultivated plot are brought under cultivation, the use of sub-numbers should be avoided unless it is absolutely necessary for the purposes of *girdawari*. In a case like this, if sufficient space is not available on the page of the *khasra* on which the original number is entered, the necessary entries can be made at the end of the *khasra* and a brief note stating that this has been done made opposite the number in question. In writing a new *khasra* care should be taken to leave sufficient space for such entries as regards numbers containing large areas of uncultivated land, portions of which are likely to be broken up from time to time.

7. As the measurements proceed the patwari will prepare form A, but the entries in columns 15 and 16 will remain in pencil till the Tahsildar has made his visit and formed his opinion as to the assessment. He will also make in the register of fields previously assessed below full rates (form C) the necessary entries relating to crops grown in the past year or in the case of villages affected by the Beas in all years since dialuvion measurements were last made.

8. The kanungo will satisfy himself that the patwari has included in his maps and *khasra* all land which should be included, will test the measurements, and check the *khasra*.

9. As soon as the *khasra* has been checked by the kanungo, the patwari will prepare in duplicate in form D a village abstract of changes due to river action. He will make all the entries in columns 1 to 3, and also those giving the details of area and revenue for the previous year in ink. The entries showing deductions and additions and the area and revenue for the current year will be made in pencil.

10. The Tahsildar will test the map, &c., on the spot, and pass orders as to classes of land, rates, and revenue after inspecting the fields and examining the entries in the *khasra* and in form C. He will cause to be entered in ink in the *khasra* the class and rate for each field as determined by himself. He will at the same time make the patwari enter in form C the rate against each field of which the class has been changed, and also all fields assessed for the first time below settlement or full rates. He will also have an extract from form C, showing those numbers only of which the assessment has been changed in the current year, put on the file. Form D will be completed by the patwari under the Tahsildar's directions. The tahsildar will add a brief note to the file, explaining the changes which have occurred and his assessment proposals. He will then sign the map, *khasra*, extract from form C, and abstract of area and revenue (form D) taking over the extract and the Government copies of the other papers. He will also sign the register (form C) which the patwari will retain in addition to his own copies of the other papers.

11. When the Revenue Officer who is empowered to pass final orders on the assessment disposes of the case, any corrections in the papers required will be made in the Government copies, and the patwari will be ordered to correct his own copies. He will also prepare in duplicate a *khewat* showing the result of the new assessment (form B) and forward both copies to the Tahsildar through the kanungo. The Tahsildar will see that the *khewat* agrees with the orders, and signing both copies will file one with the record and return the other to the patwari. The latter will embody the new figures in future *bachh* papers and will give free of charge a *fard*, showing the result, to each *khatedar* concerned.

12. The whole file regarding changes of assessment due to river will be prepared on Lucknow paper stitched at the back in book form. The tracing of maps will be placed in an envelope of the full size of the file and will not be folded more than twice.

13. The district report on changes of assessment due to river will be prepared in form F after obtaining the necessary figures from the tahsils in form E.

14. Cases frequently occur in which remission of the current demand is required in consequence of destructive inundation, although no permanent injury has been done to the soil rendering a reduction of revenue needful. When making his inspection, the Tahsildar should report on all such cases, including cases occurring in estates in which no measurements will be made in the current year. Reports recommending such remissions should be made in form A or B appended to Standing Order No. 30.

FORM A.

Khasra of changes in class of land due to river.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
				FORMER.				PRESENT.									
				Owner, briefly.		Tenant, briefly.		Area.		Class of land.		Rate of assessment.		Khewat No.		Area calculation where necessary.	
				Old.	New.	Area and kind of soil.	Rate.	Demand.	Area.	Class of land.	Kharif.	Rabi.	Class.	Rate.			

FORM B.

Khewat showing changes in the revenue of holdings due to river action as ascertained at the end of kharif 19.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
KHESRA No.				FORMER.				PRESENT.				DIFFERENCE.					
				Area and kind of soil.				Area and kind of soil.				Area.					
				Old.	New.	Rate.	Demand.	Area.	Rate.	Class of land.	Kharif.	Rabi.	Class.	Rate.			

FORM C.

Register of fields assessed below full rates and of fields assessed at grazing rates.

1	2	3	4	5	6	7	8
Khasra No.	Owner and tenant (briefly).	YEAR, 19					(Columns to be repeated for four years in all.)
		Area with detail.	Crops.		Rate.	Remarks.	
			Kharif.	Rabi.			

REFORM D.

STATEMENT OF DIALUVIUM AND ALLUVIUM ASSESSMENT MADE IN FOR THE

FORM E.

*Statement of financial results of alluvion and dialuvion assessment for the
district division for the agricultural year (kharif 19 and rabi 19) and the
proposed remission in the revenue roll and amount to be
collected as fluctuating revenue.*

FORM F. (IN ENGLISH).

Statement of financial results of alluvion and dialuvion assessment for the district made in 19 for the agricultural year (kharif 19 and rabi 19), and the proposed remission in the revenue roll and amount to be collected as fluctuating revenue.

NOTES.—*Column 3.*—The figures for the six larger rivers of the province should be given separately. Those for the minor streams may be lumped together.

Columns 6, 7 and 8.—The amount shown in column 8 will be the difference between columns 6 and 7 and should be preceded by a plus or minus, as the case may be.

Column 9.—Note in this column the officer by whom the assessments were made and tested and the method adopted in assessing. Reference should be made to settlement reports prescribing such method or to correspondence conveying special sanction.

List of villages in the Amritsar District to which the dialuvion rules will apply for the present.

This list is subject to alteration under the orders of the Collector (*vide* Rule 1 of Part B).

VILLAGES ON THE BEAS.		VILLAGES ON THE RAVI.
Tahsil Amritsar.	Tahsil Tarn Taran.	Tahsil Ajnala.
<p>Sheron Baga. Sheron Langah. Khanpur. Ghaziwal Miani. Jodhe. Bal Sara. Varaich. Budha Theb. Vazir Bhullar, Mahtab Kot.</p>	<p>Bhaloja. Chak Gagrewal. Gagrewal. Rampur Narotampur. Jalsiabad. Kiri Bodal. Darapur. Kiri Shahi. Chak Desal. Vairowal. Alampur. Beharipur. Hothian. Pindian. Kanwah. Akbarpur. Gondwal. Miani. Khakh II. Dhunda. Manak Deo. Bhniit. Kaler. Johal Dhaewala. Munds. Gujarpur. Ghurka. Dluu. Chamba Kalau. Kumbhol. Kirian.</p>	<p>Kassowala. Saharan. Kamalpur Khurd. Kamalpur Kalan. Dadre. Phulpur. Singeke. Gagger. Panjgirain. Ghumra. Daria Musa. Malikpur. Langarpur. Kot Rajada. Kotli Barwala. Shahzadabad. Budha Varsal. Budhai Chiman. Daddian. Chaharpur. Daria Mansur. Kamirpur. Bal-lab-i-daria. Gil. Bhalni Gil. Dhiansinghpur. Saluwal. Balbarwal. Khanwal. Bogban. Chhannan. Sundargarh. Bhainian. Raipur Kalan. Kotli Koka. Saido Ghazi. Shekh Bhatti. Shahaliwal. Majhi Miun. Gulgari. Niamatabad. Sherpur. Pasiawala. Balol. Hashimpur. Awan Basao. Bhindi Aulakh Khurd. Bhindi Aulakh Kalan. Fattah. Bhindi Nain. Burj. Kakkar. Bhadru. Ranian.</p>

APPENDIX V.

Statement showing total expenditure of re-settlement operations in the Amritsar District
up to 30th April 1914.

1 Major head of service.	2 Budget headings.	3 Total expenditure.	
		Rs.	Rs.
	Salary and Settlement allowance of Gazetted Officers ...	...	91,624
	A.—OFFICE ESTABLISHMENT.		
	1. Office Kanungos	11,000	
	2. Menial establishment	18,221	
	Total office establishment ...	...	29,221
	FIELD ESTABLISHMENT.		
	3. Settlement Tahsildars	18,770	
	4. Settlement Naib Tahsildars	32,881	
	5. Field Kanungos	41,954	
	6. Horse allowances of Kanungos ...	12,192	
	Total of Field establishment ...	...	1,00,797
LAND REVENUE SETTLEMENT—Imperial Service.	7. Temporary establishment	20,468	
	8. Settlement allowance to District Patwaris ...	13,283	
	9. Special allowance to Head Clerk and Nazir ...	730	
	Total ...	...	34,481
	10. Travelling allowance of officers	6,940	
	11. Travelling allowance of establishment	11,971	
	12. Contingent expenditure under head 3—Land Revenue	45,030	
	13. Contingent expenditure under head 30—Printing and Stationery.	9,716	
	Total contingent expenditure ...	...	73,657
	GRAND TOTAL ...	...	3,39,780
	Deduct on account of sale of old furniture, &c., refunded into treasury and on account of furniture, &c., transferred without charge to other settlements.		4,518
	BALANCE ...	...	3,25,267*

* Out of this sum Rs. 16,990 has been proposed to be recovered from assignees of land revenue.

APPENDIX VI.

Scheme for suspensions and remissions, with note on secure and insecure areas.

The abstract village note-books kept by the *sadr kanungo* contain detailed inspection notes regarding each village. For the convenience of the Collector, in dealing with wholesale suspensions, separate registers for each tahsil have also been drawn up showing for every estate the normal incidence of the revenue demand for each harvest. A brief note, describing the circumstances of every village classed as insecure, has been added. Estates which are ordinarily secure and in which suspensions should be needed only after two or more successive failures of harvest have been marked B in these registers. The following danger rates have been sanctioned for the various circles :—

		Kharif.		Rabi.	
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Tarn Taran—Upper Manjha	8 0 0	3 0 0
Central Manjha	7 0 0	2 8 0
Bet Bangar	5 0 0	2 0 0
Amritsar—Bet Bangar	4 0 0	3 0 0
Jandiala	4 0 0	3 0 0
Mirankot	7 0 0	3 0 0
Ajnala—All circles	5 8 0	2 8 0

In certain Ajnala villages classed as insecure the normal *kharif* rate is in excess of Rs. 5-8-0. In such villages Rs. 8 will be the danger rate. The use of the normal and danger rates is explained in paragraphs 563 and 575 of the Land Administration Manual.

2. I have classed as insecure the following number of estates:—

Whole villages in the	Upper	Manjha circle of	Tarn Taran	...	9
„ „ „	Central	„ „ „	„ „ „	...	5
„ „ „	Bet Bangar	„ „ „	„ „ „	...	6
„ „ „	Bet Bangar	„ „ „	Amritsar	...	4
„ „ „	Jandiala	„ „ „	„ „ „	...	5
„ „ „	Mirankot	„ „ „	„ „ „	...	5
„ „ „	Nahri	„ „ „	Ajnala	...	1
„ „ „	Uthar	„ „ „	„ „ „	...	12
„ „ „	Hithar	„ „ „	„ „ „	...	34
„ „ „	Sailab	„ „ „	„ „ „	...	43
Total				...	124

3. At last settlement the whole of the Tarn Taran tahsil, with the exception of two estates which have since received ample canal irrigation, was classed as secure. After some hesitation I have now classed 20 of the worst villages as insecure. In all of them irrigation is very limited and the crops are mainly dependent on rainfall. In nearly all the owners are considerably involved in debt. By classing them as insecure, I do not mean to imply that the failure of a single harvest will necessitate suspensions. My object is rather to draw attention to these estates as particularly weak communities, which may find difficulty in paying the demand in full after two or more successive bad seasons. But the people are not accustomed to suspensions, the incidence of the demand in normal years is light, especially in the rabi harvest, and the danger rate sanctioned is a high one, equivalent in most estates to double the

normal incidence or even more. The improbable event of this rate being reached or exceeded should be brought to the notice of the Collector, who can then decide what relief is required in each village.

4. The foregoing remarks apply also to the 14 estates in the Amritsar tahsil now noted as insecure, all of which were classed as secure at last settlement. In this tahsil the normal incidence of the *rabi* demand is higher than in Tarn Taran, but suspensions are not likely to be required, even in these 14 estates, except when there have been two successive failures of the harvest. In a good many of the sandridge villages of the Jandiala circle, where there is no canal irrigation, a dry winter may mean extensive failure of the *barani* crops. But nearly all these villages have an excellent, though often restricted, *chuk* of well land, and their owners are usually sturdy Jats with extraneous resources, such as the income from service, to fall back on. Villages of this type I have classed as secure. The 5 estates in this circle classed as insecure all belong to the weaker agricultural tribes, such as Rajputs or Dogars.

5. In the Ajnala Nahri circle only one village, Kotla Dum (No. 316), has been classed as insecure for reasons noted in the register. In the Utuar circle 12 villages, mainly on the northern edge of the circle and beyond the limits of canal irrigation, have been so classed. These are all genuinely bad estates with poor soil, precarious crops and weak wells. Extensive failure in a single harvest might necessitate the suspension of part of the demand. The remarks that follow regarding the Sailab and Hithar circles apply generally to these 12 villages.

6. The paragraphs that follow relate to the only really insecure tract in the district, that lying between the Ravi and the Sakki rivers. Here the *kharif* crops are peculiarly precarious, as the whole country is alluvial in character and liable to flooding after a heavy rainfall, or whenever the Ravi and Sakki are in spate. A plentiful monsoon, while giving bumper crops in the rest of the district, may do extensive damage in the Sailab and Hithar circles. But a dry winter is even more to be dreaded than a wet summer, especially in the Hithar. Quite three-fourths of the crops of the year are raised in the *rabi* and a prolonged drought has a disastrous effect on a naturally poor soil. The wells are shallow and easily exhausted if continuously worked, while the cattle are undersized and quickly give out if kept short of fodder. On the other hand, a very wet winter usually means a high Ravi, and I have seen many acres of wheat approaching maturity eroded in the riverain villages. In addition to this peculiar liability to seasonal calamities, holdings in these two circles are miserably small, the personnel of the cultivating classes is generally weak, communications are difficult, and markets practically non-existent. The past fiscal history of the tract, which is related in some detail in paragraphs 11 to 14 of the assessment report, is one of almost continuous suspensions and remissions. Its capacity to meet the demand has been slightly increased at the new settlement (a) by a slight reduction in the Sailab circle, (b) by a more equitable distribution of the demand between villages, and (c) by the introduction of arrangements under which a smaller proportion of the revenue in most villages will be payable after the *kharif* harvest, in lieu of the old system of equal instalments for each harvest. But even now the tract is one that will always require lenient revenue administration.

7. In the Sailab the only really strong estates are a group of about a dozen at the top end of the circle adjoining Batala tahsil, which are owned by fairly prosperous Valla Jats. Of the few other villages classed as secure, the demand in 14 or 15 is wholly fluctuating. In these sufficient relief will ordinarily be given under the rules for di-alluvion assessments for the commonest form of calamity, *viz.*, avulsion by river action. But it must be remembered that many of these estates are as poor communities as any in the circle and existence in them is always a struggle. They will always require watching, and suspensions or even remissions on a liberal scale should be granted should any disaster occur that is not met by the di-alluvion rules. In the Hithar circle the danger rate will be from one and a-half times to twice the normal incidence. But in the Sailab the "normal" incidence is often quite misleading. The crops returns of the "selected" years do not give a true idea of the capacity of this circle, as pointed out in paragraph 30 of the assessment report, the cultivated area during those years having been much larger than it is at present. On the existing cultivated area some 5,500 acres of crops will be matured in a fairly good *kharif* and 17,700 in the *rabi*. This makes the incidence of the new demand about Rs. 3-6-7 per acre in the *kharif* and Re. 1-9-5 in the *rabi*. These rates should be taken as approximately normal for the whole circle, and little regard should be paid to the "normal incidence" as shown in the register.

8. Suspensions will, as a rule, only be necessary on account of failure of crops in a single *kharif*, when the promise for the coming *rabi* is bad. The people are well accustomed to borrow in order to pay the *kharif* demand, and this they have no difficulty in doing if there is the prospect of a good *rabi*. When the *rabi* prospects are poor the *sahukars* are chary of advancing money, and in this case suspensions should be freely given if asked for. It is

of little use suspending less than half the demand for any one harvest, but one half should usually be sufficient, except in very small estates or when extensive failure in the *rabi* follows a poor *kharif*. In such a case three-fourths or even the whole of the *rabi* demand should be suspended. But it will never be safe to say that throughout either circle a certain proportion of the demand should be suspended in each village. The villages vary widely and the circumstances of each should be separately examined in dealing with questions both of suspensions and recoveries. A personal inspection by the Collector or his Revenue Assistant is, in my opinion, indispensable, especially when it has to be decided what proportion of suspended revenue is to be collected with the current demand. During such tours enquiry should be made *inter alia* into the amount of fodder available and the number and condition of the cattle. In making recoveries of suspended revenue throughout the insecure tract a good general rule will be that the total amount to be realized in any one harvest, including arrears, should not exceed 1½ times the normal incidence. But to this rule there will be obvious exceptions. With a bumper *rabi* more may be recovered, but the total amount should never exceed double the current demand. The prevailing prices of the principal staples should be considered, and it is a good plan to work out a rough half net asset estimate for each village based on these prices, the fodder crops and less important cereals being neglected. In this connection it should not be overlooked that prices in Ajnala are generally a good deal below those ruling in Amritsar.

9. Remissions for "extraordinary" calamities will be regulated by the principles laid down in paragraph 564 of the Land Administration Manual. As regards the remission of arrears of suspended revenue, the directions in paragraph 578 of the Manual should be followed. Care should be taken that no remission of revenue is granted to a landlord who has not remitted the rent payable by his tenants (section 80 of Act XVI of 1887).

10. A list of all villages classed as insecure is appended.

January 1914.

H. D. CRAIK,

Settlement Officer, Amritsar.

List of villages classed as insecure [paragraph 22 of the Financial Commissioner's Standing Order No. 30]

1	2	3	4	5
Name of taluk.	Serial No.	Assessment circle.	Hadast No.	Name of village.
Amritsar	1	Bet Bangar	...	5 Miani Ghaziwal.
	2	Ditto	...	8 Waraich.
	3	Ditto	...	9 Budha Theh.
	4	Ditto	...	78 Beriwala.
	5	Jandiala	...	100 Banjarwal.
	6	Ditto	...	118 Sangrai.
	7	Ditto	...	121 Maluwal.
	8	Ditto	...	147 Vadali Dogran.
	9	Ditto	...	173 Miran Chak.
	10	Mirankot	...	859 Khairabad.
	11	Ditto	...	866 Kathanian.
	12	Ditto	...	867 Hamidpura.
	13	Ditto	...	873 Rampura.
	14	Ditto	...	876 Khurmanian.

List of villages classed as insecure [paragraph 22 of the Financial Commissioner's Standing Order No. 30]—continued.

1	2	3	4	5
Tahsil.	Serial No.	Assessment circle.	Hobdast No.	Name of village.
	1	Upper Manjha	16	Gharindi.
	2	Ditto	20	Kallewala.
	3	Ditto	68	Fatteh Chak.
	4	Ditto	95	Naurangabad.
	5	Ditto	99	Chak Banwalipur.
	6	Ditto	102	Kaler.
	7	Ditto	103	Banwalipur.
	8	Ditto	106	Begampur.
	9	Ditto	109	Shaikh Chak.
	10	Central Manjha	162	Bagrian.
Tarn Taran	11	Ditto	220	Kot Jaspat.
	12	Ditto	264	Jatta.
	13	Ditto	266	Chabbal.
	14	Ditto	317	Ghazipur.
	15	Bet Bangar	329	Chak Desal.
	16	Ditto	331	Darapur.
	17	Ditto	340	Miani.
	18	Ditto	344	Manak Deo.
	19	Ditto	351	Gujarpur.
	20	Ditto	352	Ghorkha.
	1	Saileb	3	Bhadru.
	2	Ditto	4	Manj.
	3	Ditte	5	Lodi Gujar.
	4	Ditto	6	Saidpur Kalan.
	5	Ditto	7	Hetampur.
	6	Ditto	8	Chhanan.
	7	Ditto	9	Bhagupur Uthar.
	8	Ditto	10	Mandianwala.
Ajnala	9	Ditto	11	Mohleke.
	10	Ditto	12	Dag.
	11	Ditto	13	Tut.
	12	Ditto	14	Vera.
	13	Ditto	15	Bhagupur Bet.
	14	Ditto	16	Kothi Dosandhi.
	15	Ditto	17	Kutiwal.
	16	Ditto	18	Tur.

List of villages classed as insecure [paragraph 22 of the Financial Commissioner's Standing Order No. 30]—continued.

1	2	3	4	5
Name of tahsil.	Serial No.	Assessment circle.	Hubast No.	Name of village.
	17	Sailab	...	Burj.
	18	Ditto	...	Fattah.
	19	Ditto	...	Bhindi Aulakh Kalan.
	20	Ditto	...	Bhindi Aulakh Khurd.
	21	Ditto	...	Bhindi Sayadan.
	22	Ditto	...	Jhunj.
	23	Ditto	...	Tanana.
	24	Ditto	...	Ghogha.
	25	Ditto	...	Awan Bassao.
	26	Ditto	...	Balol.
	27	Ditto	...	Sherpur.
	28	Ditto	...	Niamatabad.
	29	Ditto	...	Gulgarh.
	30	Ditto	...	Sheikh Bhatti.
	31	Ditto	...	Saido Ghazi.
	32	Ditto	...	Chhanan.
	33	Ditto	...	Khanwal.
	34	Ditto	...	Balharwal.
Ajnala—contd.	35	Ditto	...	Sahuwal.
	36	Ditto	...	Dhian Singhpora.
	37	Ditto	...	Gil.
	38	Ditto	...	Daria Mensur.
	39	Ditto	...	Budhai Chiman.
	40	Ditto	...	Kotli Barwala.
	41	Ditto	...	Kot Rajada.
	42	Ditto	...	Malikpur.
	43	Ditto	...	Daria Musa.
	44	Hithar	...	Mangu Naru.
	45	Ditto	...	Shahzada.
	46	Ditto	...	Kot Gurhakhsh.
	47	Ditto	...	Paasia.
	48	Ditto	...	Talibpur.
	49	Ditto	...	Mohmand Mandranwala.
	50	Ditto	...	Pindori.
	51	Ditto	...	Kotla.
	52	Ditto	...	Nangal Sahaul.
	53	Ditto	...	Rurewal.

List of villages classed as insecure [paragraph 22 of the Financial Commissioner's Standing Order No. 30]—concluded.

1	2	3	4	5
Name of tahsil.	Serial No.	Assessment circle.	Habist No.	Name of village.
	54	Hithar	...	89 Awan Muttasil Ram Dae.
	55	Ditto	...	90 Pairewal.
	56	Ditto	...	108 Dalla Rajputan.
	57	Ditto	...	110 Tera Rajputan.
	58	Ditto	...	112 Aliwal.
	59	Ditto	...	113 Inayatpur.
	60	Ditto	...	117 Lakhwal.
	61	Ditto	...	118 Fattahwal.
	62	Ditto	...	119 Chak Dogaran.
	63	Ditto	...	121 Sarangdeo.
	64	Ditto	...	124 Chak Aulan.
	65	Ditto	...	126 Bikraur.
	66	Ditto	...	127 Saidpur Khurd.
	67	Ditto	...	129 Dial.
	68	Ditto	...	130 Barlas.
	69	Ditto	...	137 Naipal.
	70	Ditto	...	138 Kotli Mughalan.
Ajnala—concl'd.	71	Ditto	...	139 Miadi Kalan.
	72	Ditto	...	141 Panju Kalal.
	73	Ditto	...	142 Jasran.
	74	Ditto	...	143 Chak Fatta Khan.
	75	Ditto	...	144 Miadi Khurd.
	76	Ditto	...	151 Variah.
	77	Ditto	...	152 Muzaffarpur.
	78	Uthar	...	153 Chuchakwal.
	79	Ditto	...	154 Awan Lakha Singh.
	80	Ditto	...	160 Bhilowal.
	81	Ditto	...	196 Karial.
	82	Ditto	...	202 Umarpura.
	83	Ditto	...	203 Chaia.
	84	Ditto	...	205 Chhina Karmi Singh.
	85	Ditto	...	211 Bollian.
	86	Ditto	...	215 Talwandi Rai Dadu.
	87	Ditto	...	216 Kotli Korotana.
	88	Ditto	...	217 Chak Phulla.
	89	Ditto	...	218 Sara.
	90	Nahri	...	316 Kotla Dum.

Summary.

Amritsar	...	...	...	...	...	...	14
Tarn Taran	...	...	...	...	...	...	20
Ajnala	...	...	...	...	...	...	90
					Total	...	124

APPENDIX VII.

Principal Gazette notifications relating to the present settlement of the Amritsar District.

No.	Date.	Abstract.
2693 S. and 2694 S.	29th April 1910	Sanctions a general re-assessment of the land revenue of, and a special revision of the record-of-rights for the estates included in the Amritsar district.
1321	... 8th November 1910	Appoints K. S. Shaikh Fazal Karim, Extra Assistant Commissioner, as Extra Assistant Settlement Officer.
1321	... 8th November 1910	Appoints H. D. Craik, Esquire, I. C. S., as Settlement Officer.
1281 E.	... 29th October 1910	Invests H. D. Craik, Esquire, I. C. S., with the powers of a Magistrate of the 1st class.
1281 F.	... 29th October 1910	Confers on H. D. Craik, Esquire, I. C. S., all the powers of a Collector under Acts XVI and VII of 1887, with the exception of chapter VI of the latter Act. Such powers will be exercised within the local limits of the Amritsar and Gurdaspur Districts. Mr. Craik in the exercise of these powers shall not be subject to the control of the Collectors of the Amritsar and Gurdaspur Districts.
863	... 11th June 1913	Grants Mr. Craik 20 days' privilege leave from 17th May 1913, afternoon.
886	... 18th June 1913	Mr. Craik returns from leave on 9th June 1913 forenoon.
936	... 25th June 1913	Appoints K. S. Shaikh Fazal Karim as Settlement Officer in addition to his own duties from the afternoon of the 17th May 1913 to the forenoon of the 9th June 1913.

APPENDIX VIII.

Glossary of Vernacular Terms used in the Final Settlement Report.

Vernacular.	English.
Abadi ...	Village site.
Abi ...	Land irrigated by lift from tanks, marshes and streams.
Abiana ...	That portion of land revenue due to irrigation.
Ala lambardar	Chief headman.
Ala lambardari	Chief headmanship.
Bachh ...	Distribution of revenue over holdings.
Banjar jadid	New fallow.
Banjar kadim	Old fallow.
Baraui ...	Land dependent on rainfall.
Batta ...	Fractional.
Bigha ...	A local unit of area.
Chahi ...	Land irrigated by wells.
Chak ...	A circle or sub-division.
Doab ...	Land between two rivers.
Ghumao ...	A local unit of area.
Girdawari	Harvest inspection.
Gur ...	Consolidated sugarcane juice or crude sugar.
Hithar ...	Lowland tract.
Ijara ...	A form of lease.
Ilaqua ...	A tract or district.
Inam ...	A cash allowance paid to a rural official.
Inamdar ...	Holder of a cash allowance.
Jagir ...	A large assignment of land revenue.
Jagirdar ...	The holder of a large assignment of land revenue.
Jama ...	Revenue demand.
Jamabandi	Annual record-of-rights of a village.
Jh l ...	A swamp.
Kacha ...	Unmetalled.
Kadam or karm	A local measure of length.
Kallar ...	Saline efflorescence.

Glossary of Vernacular Terms used in the Final Settlement Report—continued.

Vernacular.	English.
Kanal ...	A local measure of area.
Kanungo	A revenue officer over the patwari.
Karunkan	A figure marked on a map to denote distance.
Khalsa ...	Revenue received by Government, not being assigned to grantees.
Kharif ...	The autumn harvest.
Khas ...	Special.
Khasra-girdawari	A register of fields used in harvest inspections.
Khatauni	A holding slip.
Lakh ...	One hundred thousand.
Lambardar	Village headman.
Lambardari	Village headmanship.
Maira ...	A light loamy soil.
Mafi	A small assignment of land revenue.
Malba	A cess levied for joint village expenses.
Masar	A lentil (<i>ervum lens</i>).
Mash	A kind of pulse.
Malikana	Payment made to a landowner in recognition of his proprietary rights.
Marla ...	A local unit of area.
Min	A fractional number.
Misl	A Sikh confederacy.
Moth	A kind of pulse.
Muharrir	A clerk.
Mujmili	A collective map.
Mung	A kind of pulse.
Musavi	A survey sheet.
Nahri ...	Land irrigated from a canal.
Nahri-partia	Land revenue specially assessed on canal irrigation.
Nala	Stream or drainage line.
Pachotra	Cess levied for payment of headmen.
Pakka ...	(a) Metalled, of a road, (b) beyond reach of floods, of alluvial land.
Panahi ...	Protected, a form of tenancy.

Glossary of Vernacular Terms used in the Final Settlement Report—concluded.

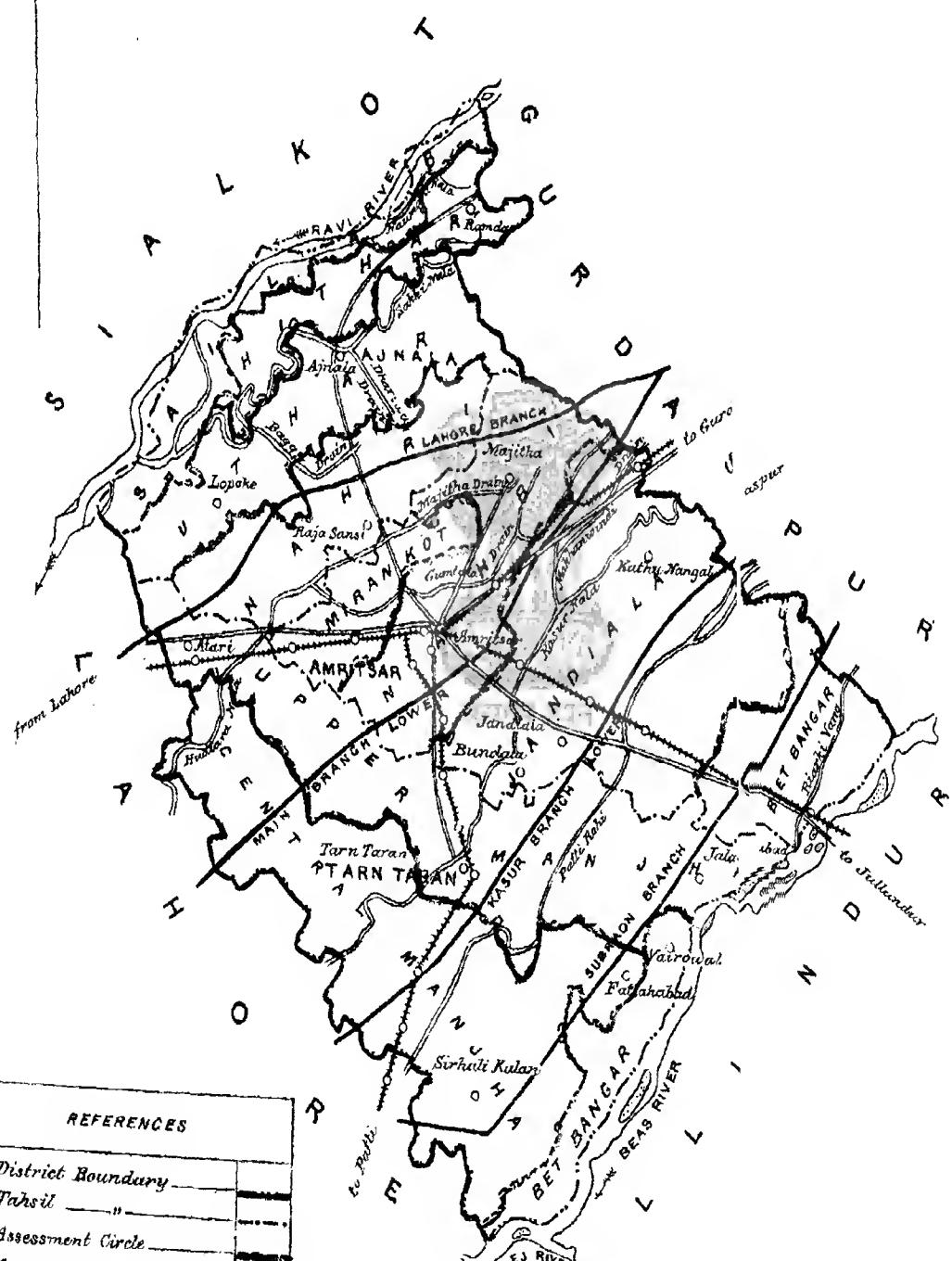
Vernacular.	English.
Pargana ...	A tract or district.
Part patwar	Patwari's copy of map.
Part Sarkar	Authoritative copy of map.
Part tahsil	Tahsil copy of map.
Patti ...	A sub-division of a village.
Patwari ...	The village accountant.
Rabi ...	The spring harvest.
Rais ...	Indian notable.
Riwayat-i-am	A statement of prevalent customs.
Rohi ...	A drainage line.
Sadr ...	Head-quarters of a district.
Sailab ...	Land affected by floods from rivers.
Sarsahi ...	A local unit of area.
Sarshaf ...	Rape.
Safed-posh	A local notable, equivalent to an inamdar.
Tahsil ...	An administrative division of a district.
Tahsildar	Officer in charge of a tahsil.
Taraf ...	A sub-division of a village.
Tatimma	Supplementary.
Thana patti	A kind of cess sometimes levied from village menials.
Tibba ...	Sandy soil.
Til ...	Sesamum.
Toria ...	A kind of oil-seed.
Uthar ...	Upland tract.
Wajib-ul-arz	A village administration paper.
Zabti ...	Customary cash rates taken on certain crops.
Zail ...	A group of villages.
Zaildar ...	A rural official in charge of a group of villages.
Zaildari ...	Zaildarship.
Zamindar	An agriculturist.
Zamindari	Pertaining to a zamindar.

MAP
OF THE
AMRITSAR DISTRICT

SHOWING ASSESSMENT CIRCLES,
CANALS AND ROADS &c.

Scale 1 inch = 8 Miles

8 4 9 5 10 11 12



REFERENCES

District Boundary	
Tahsil	
Assessment Circle	
Canal	
River	
Nala and Drainage Line	
Railway	
Metalled Road	